

LOUISIANA WILDLIFE AND FISHERIES COMMISSION

MINUTES

FEBRUARY 5, 2004

BILL A. BUSBICE, JR.  
CHAIRMAN

BATON ROUGE, LOUISIANA

The following constitute minutes of the Commission Meeting  
and are not a verbatim transcript of the proceedings.

Tapes of the meetings are kept at the  
Louisiana Department of Wildlife and Fisheries  
2000 Quail Drive

Baton Rouge, Louisiana 70808

For more information, call (225) 765-2806

AGENDA  
LOUISIANA WILDLIFE AND FISHERIES COMMISSION  
BATON ROUGE, LOUISIANA  
FEBRUARY 5, 2004

|  | Page |
|--|------|
| 1. Roll Call   | 1    |
| 2. Approval of Minutes of January 8, 2004  | 1    |
| 3. Commission Special Announcements  | 1    |
| 4. Recognition of Angela Capella for Receiving<br>Outstanding Service to Informal Science Education<br>Award by Louisiana Science Teachers Association | 1    |
| 5. Enforcement & Aviation Reports/January  | 2    |
| 6. Notice of Intent - Shark Harvest Regulations  | 3    |
| 7. Presentation of Stock Assessments for Black Drum,<br>Striped Mullet, Southern Flounder and Sheepshead   | 10   |
| 8. Derelict Crab Trap Removal Program Presentation   | 11   |
| 9. Hunter Safety Report  | 13   |
| 10. Public Information Update Presentation   | 13   |
| 11. Set June 2004 Meeting Date   | 14   |
| 12. Public Comments  | 14   |
| 13. Adjournment  | 14   |

MINUTES OF THE MEETING  
OF  
LOUISIANA WILDLIFE AND FISHERIES COMMISSION

Thursday, February 5, 2004

Chairman Bill Busbice, Jr. presiding.

Billy Broussard  
Lee Felterman  
Henry Mouton  
Jerry Stone

Secretary Dwight Landreneau was also present.

Commissioners Terry Denmon and Wayne Sagrera were absent from the meeting.

Chairman Busbice called for a motion for approval of the **January 8, 2004 Commission Minutes**. A motion for approval was made by Commissioner Mouton and seconded by Commissioner Felterman. The motion passed with no opposition.

Under **Commission Special Announcements** for this month, Commissioner Mouton stated he was hearing from residents of Mississippi they want to come fish in the Chandeleurs at a greatly reduced cost or at no cost at all. He felt if they did not want to pay for a Louisiana license, they should stay in Mississippi. Also Commissioner Mouton requested the Commission "stand tall" and make them pay the fee if this issue was presented.

Chairman Busbice then introduced Mr. Dwight Landreneau as being the recently appointed Secretary for the Department of Wildlife and Fisheries. Secretary Landreneau stated it was a pleasure to serve as Secretary for the Department and looked forward to working with the Commission in facing the natural resource challenges that everyone helps to protect and are used by the people of this State. Secretary Landreneau commented that Governor Blanco is interested in the stewardship of the natural resources and will be involved with the Department. He then stated he looks forward to working with the Commission over the next four years to make sure the needs of the public are met.

**Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association** was handled by Mr. Tommy Prickett. Ms. Angela Capella, an educator from Region 3, works at the Booker Fowler Fish Hatchery and has developed a public visitor center and program there. These programs are directed at young people particularly in

the education system. Recently Ms. Capella was given an award as the Outstanding Informal Educator in the State of Louisiana by the Louisiana Science Teachers Association. Mr. Prickett then noted that Ms. Capella is the President of the Louisiana Environmental Educators Association and the Department's representative on the Southern Association of Marine Educators. One program Ms. Capella has developed was raising paddlefish in the classroom which helps the teachers as it counts toward part of a child's curriculum. Mr. Prickett then presented a plaque to Ms. Capella.

Chairman Busbice suggested to his fellow Commissioners they should visit the Booker Fowler Fish Hatchery and felt it was a good place for those interested in bass fishing to go to. Commissioner Felterman agreed that it was a great place to visit.

The Monthly Law Enforcement Report for January was given by Major Keith LaCaze. The following numbers were issued during January.

Region I - Minden - 100 citations and 10 warnings.

Region II - Monroe - 62 citations, 4 warnings and 5 public assists.

Region III - Alexandria - 74 citations and 1 warning.

Region IV - Ferriday - 64 citations and 8 public assists.

Region V - Lake Charles - 105 citations, 1 warning and 2 public assists.

Region VI - Opelousas - 118 citations and 19 warnings.

Region VII - Baton Rouge - 142 citations, 6 warnings and 6 public assists.

Region VIII - New Orleans - 222 citations, 24 warnings and 1 public assist.

Region IX - Schriever - 162 citations, 24 warnings and 4 public assists.

Oyster Strike Force - 34 citations.

Seafood Investigation Unit - 19 citations.

SWEP - 26 citations.

Refuge Patrol - 35 citations and 7 public assists.

The grand total of citations issued statewide for the month of January was 1,049. Also 89 warning citations were issued and agents helped in 26 public assist cases.

The aviation report for January 2004 showed enforcement pilots flew three airplanes a total of 70.7 hours for enforcement and 24.5 hours for other divisions. No citations were issued.

Major LaCaze then stated Operation Game Thief met recently to review cases from their quarterly reports as well as it being their Annual Meeting. For the quarter, rewards were paid on 16 cases which totaled \$6,500. For the year 2003, \$11,500 was paid out in rewards and the total paid out since inception is \$174,600. Copies of News Releases were given to the Commissioners. Major LaCaze then reported on one News Release where an agent and several residents rescued 6 people, not wearing PFD's, from an overturned boat. All of those rescued survived the ordeal. Commissioner Felterman asked if more people were night hunting now or were more cases being made? Major LaCaze felt more people were night hunting now which occurs in 3 year cycles. Commissioner Felterman asked what are the basis for confiscating trucks? Major LaCaze thought they were from night hunting cases. He added that anything in connection with the violation could be seized and the courts would decide if it would be forfeited to the Department. Commissioner Stone noticed that as the night hunting cases were increasing, the drug confiscations were decreasing. Chairman Busbice again stated he would like to see a mandatory jail sentence or community service handed to those night hunting violators. He then advised Secretary Landreneau he would like to meet with both he and the Governor to talk about this issue. Commissioner Mouton told of a case where a night hunter on drugs was caught by Texas wardens and they relayed how dangerous the situation could have been.

Chairman Busbice then asked if there have been any fatalities? Major LaCaze noted during the past hunting season, there were 15 cases for hunting or discharging firearms from public roads, 92 for standing or hunting in a public road, 11 for discharging firearms or hunting from a levee, 163 for hunting or taking a deer from public road and 232 cases for failure to wear hunter orange. He then stated there was one fatality in Region 9 by someone rabbit hunting. Commissioner Mouton suggested the Chairman send a letter to District Attorney's asking that the night hunting cases be prosecuted. Chairman Busbice asked Major LaCaze to prepare a letter for his signature.

Chairman Busbice then introduced Mrs. Janice Lansing as the new Undersecretary for the Department. He also stated he looked forward to working with her in the future.

**Notice of Intent - Shark Harvest Regulations** began with Mr. Randy Pausina stating this proposed rule would modify the shark

rules. This modification would clarify existing language and attempted to maintain consistency with federal regulations for both commercial and recreational fishermen in Federal and State waters. These actions would ensure the regulations complement federal rules in waters beyond the Territorial Sea and to assist in identifying shark species. Commissioner Mouton asked about an overlap with the season in federal and state waters. Mr. Pausina stated that change would not become effective until the 2005 shark season, so there was still time to work out the details. Commissioner Mouton asked that he be kept informed of the situation. He then read the Therefore Be It Resolved portion of the Resolution. Commissioner Broussard made a motion to accept the Resolution and it was seconded by Commissioner Mouton. The motion passed with no opposition.

(The full text of the Resolution and Notice of Intent are made a part of the record.)

#### RESOLUTION

##### MODIFICATION OF SHARK HARVEST RULES

adopted by the  
Louisiana Wildlife and Fisheries Commission  
February 5, 2004

- WHEREAS, regulations promulgated by the Louisiana Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, have provided rules for the harvesting of sharks in Louisiana's state waters, and
- WHEREAS, NMFS has adopted management measures for sharks harvested in the EEZ off of Louisiana, and
- WHEREAS, adoption of compatible regulations for Louisiana state waters where feasible would enhance effectiveness and enforceability of the regulations already in place for sharks harvested in the EEZ off of Louisiana, and
- WHEREAS, substantial fisheries for sharks do also occur in Louisiana state waters that are significant to the citizens of the State of Louisiana and thus enactment of compatible regulations may also impact those persons involved in those fisheries, and
- WHEREAS, R.S. 56:6(10), 56:326(E)(2), 56:326.1, and 56:326.3 provide authority for adoption of this rule through the Wildlife and Fisheries Commission, and
- WHEREAS, R.S. 56:325.2(A) provides that all sharks possessed by a recreational fisherman shall be maintained with head and

fins intact and shall not be skinned until set or put on shore,

THEREFORE BE IT RESOLVED, that the Wildlife and Fisheries Commission hereby promulgates a Notice of Intent to modify existing regulations to incorporate federal law and regulation changes for sharks as part of the state regulations, clarifies the existing rule, and

BE IT FURTHER RESOLVED, the complete copy of the Notice of Intent and proposed rule are attached to and made part of this resolution, and

BE IT FURTHER RESOLVED, that this Rule shall become effective upon promulgation, and

BE IT FURTHER RESOLVED, that the Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

Bill A. Busbice, Jr., Chairman  
Wildlife and Fisheries  
Commission

Dwight Landreneau, Secretary  
Department of Wildlife and  
Fisheries

#### NOTICE OF INTENT

Department of Wildlife and Fisheries  
Wildlife and Fisheries Commission

#### Sharks and Sawfishes

The Wildlife and Fisheries Commission does hereby give notice of its intent to amend a Rule, LAC 76:VII.357, modifying the existing rule. Authority for adoption of this Rule is included in R.S. 56:6(10), 56:320.2(C), 56:325.2 (A), 56:326.1, 56:326.3, and 56:326(E)(2). Said Rule is attached to and made a part of this Notice of Intent.

#### Title 76

#### WILDLIFE AND FISHERIES

#### Part VII. Fish and Other Aquatic Life

#### Chapter 3. Saltwater Sport and Commercial Fishery



### §357. Sharks and Sawfishes - Harvest Regulations

A. The following rules and regulations are established for the taking and possession of sharks (including sawfishes) (Class Elasmobranchiomorphi: Orders Hexanchiformes, Lamniformes, Squaliformes, and Rajiformes) from within or without Louisiana waters. The provisions of this Section shall not apply to shrimp or menhaden harvest, and nothing contained herein is intended or shall be construed to repeal, amend, or otherwise modify the provisions of law applicable to shrimp or menhaden fishing, except for provisions:

1. outlawing finning of shark;
2. requiring a Commercial State Shark Permit "~~Shark Permit~~" for sale, barter, trade, or exchange;

\* \* \*

B. For management purposes, sharks are divided into the following categories:

1. Small Coastal Sharks - Bonnethead shark, Atlantic sharpnose shark, ~~B~~blacknose shark, ~~F~~finetooth shark.
2. Large Coastal Sharks - Great ~~H~~hammerhead, ~~S~~scalloped ~~H~~hammerhead, ~~S~~smooth ~~H~~hammerhead, ~~N~~nurse shark, ~~B~~blacktip shark, ~~B~~bull shark, ~~E~~lemon shark, ~~S~~sandbar shark, ~~S~~ilky shark, ~~S~~spinner shark, ~~T~~tiger shark.
3. Pelagic Sharks - Porbeagle shark, ~~S~~shortfin mako, ~~B~~blue shark, ~~O~~ceanic whitetip shark, ~~T~~hresher shark.
4. Prohibited Species - Basking shark, ~~W~~white shark, ~~B~~bigeye sand tiger, ~~S~~sand tiger, ~~W~~hale shark, ~~S~~smalltooth sawfish, ~~H~~argetooth sawfish, Atlantic angel shark, Caribbean sharpnose shark, ~~S~~smalltail shark, ~~B~~ignose shark, Caribbean reef shark, ~~B~~dusky shark, Galapagos shark, ~~N~~narrowtooth shark, ~~N~~ight shark, ~~B~~bigeye sixgill shark, ~~B~~bigeye thresher shark, ~~E~~longfin mako, ~~S~~evengill shark, ~~S~~sixgill shark.

C. In addition to all other licenses and permits required by law, a valid original Commercial State Shark Permit "~~Shark Permit~~" shall be annually required for persons commercially taking shark from Louisiana waters and for persons selling, exchanging, or bartering sharks as required by law; the valid original permit shall be in immediate possession of the permittee while engaged in fishing for, possessing, selling, bartering, trading, or exchanging shark.

D. No person shall purchase, sell, exchange, barter or attempt to purchase, sell, exchange, or barter any sharks in excess

of any possession limit for which a state or federal commercial permit was issued.

E. 1. All persons who do not possess a Commercial State Shark Permit ~~"Shark Permit"~~ issued by the Department of Wildlife and Fisheries, and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~Shark Permit~~ issued by the National Marine Fisheries Service, are limited to a recreational possession limit. All persons who do not possess a Louisiana Commercial State Shark Permit ~~"Shark Permit"~~ and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~permit~~ issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks, shall not sell, barter, trade, exchange or attempt to sell, barter, trade or exchange any sharks, or possess any sharks in excess of a recreational possession limit. Sharks taken incidental to menhaden fishing, that are retained on the vessel as part of the harvest, may be retained and sold only as a mixed part of the total harvest, and shall not be retained, held, or sold, purchased, bartered, traded, or exchanged separately. Sharks retained as a result of menhaden fishing shall not exceed legal bycatch allowances for menhaden fishing as provided for in R.S. 56:324.

2. Legally licensed Louisiana wholesale/retail seafood dealers, retail seafood dealers, restaurants, and retail grocers are not required to hold a Commercial State Shark Permit ~~"Shark Permit"~~ in order to purchase, possess, exchange, barter and sell any quantities of sharks, so long as they maintain records as required by R.S. 56:306.5 and R.S. 56:306.6.

F. Sharks taken under a recreational bag limit shall not be sold, purchased, exchanged, traded, bartered, or attempted to be sold, purchased, exchanged, traded, or bartered. A person subject to a bag limit shall not possess at any time, regardless of the number of trips or the duration of a trip, any shark in excess of the recreational bag limits or less than minimum size limits as follows:

1. All sharks taken under a recreational bag limit within or without Louisiana waters must be at least 54 inches fork length, except that the minimum size limit does not apply for Atlantic sharpnose or bonnethead sharks.

2. Owners/operators of vessels other than those taking sharks in compliance with a state or federal commercial permit are restricted to No no more than one shark from either the large coastal, small coastal or pelagic group not taken under a commercial permit may be retained per vessel per trip within or without Louisiana waters, subject to the size limits described in LAC 76:VII.357(F)1, and, in addition, no person shall possess more than one Atlantic sharpnose shark and one bonnethead shark may be retained per person per trip within or without Louisiana waters.

~~Regardless of the length of a trip, no more than one Atlantic sharpnose shark per person may be possessed.~~

3. All owners/operators of vessels recreationally fishing for and/or retaining regulated Atlantic Highly Migratory Species (Atlantic tunas, sharks, swordfish and billfish) in or from the EEZ must obtain and possess a Federal Atlantic Highly Migratory Species Angling permit.

G. Those persons possessing a Federal Commercial Directed or Incidental Limited Access Shark Permit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks are limited to daily take, trip and possession limits as specified in that Federal Permit. Regardless of where fishing a A person aboard a vessel for which a Federal Shark Permit has been issued shall not retain, possess, barter, trade, or exchange shark of any species group for which the commercial quota has been reached and the season closed in Federal waters.

H. 1. A vessel that has been issued or possesses a federal Commercial Directed or Incidental Limited Access sShark pPermit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of the designated trip limits, as established under the Atlantic Highly Migratory Species Plan and published in the Federal Register, 4,000 pounds, dressed weight regardless of where taken. No person shall purchase, barter, trade, or exchange shark in excess of the designated trip limits 4,000 pounds, dressed weight, or from any person who does not possess a Louisiana Commercial State Shark Permit shark permit or fFederal Commercial Directed or Incidental Limited Access pPermit, if applicable.

2. Persons possessing a Commercial State Shark Permit Louisiana "Shark Permit" shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of 4,000 pounds, dressed weight, taken from Louisiana state waters.

3. Wholesale/retail seafood dealers who receive, purchase, trade for, or barter for Atlantic sharks, taken from the EEZ, from a fishing vessel must possess a valid Federal Dealer Permit.

I. A person aboard a vessel for which a fFederal Commercial Directed or Incidental Limited Access sShark pPermit has been issued, or persons aboard a vessel fishing for or possessing shark in the EEZ shall comply with all applicable federal regulations.

J. Fins

\* \* \*

2. ~~Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are disproportionate to the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered. All sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore.~~

3. Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing. Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are in excess of 5 percent of the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered.

4. Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing.

5. All mako sharks possessed aboard a commercial fishing vessel shall have fins intact.

\* \* \*

#### M. Seasonal Closures

1. All Louisiana State waters out to the seaward boundary of the Louisiana Territorial Sea shall be closed to the recreational and commercial harvest of all sharks between April 1 and June 30 of each year. A holder of a Federal Commercial Directed or Incidental Limited Access Shark Permit may legally harvest sharks from Federal waters beyond the Louisiana Territorial Sea and bring those sharks into Louisiana waters for sale within the provisions of that Federal Shark Permit. Effective with this closure, no person shall commercially harvest, purchase, barter, trade, sell or attempt to purchase, barter, trade or sell sharks from the closed area. Effective with the closure, no person shall retain or possess any sharks in the closed area. Sharks taken incidental to shrimp or menhaden fishing in the closed area, that are retained on the vessel as part of the harvest, may be retained only as a mixed part of the total harvest, and shall not be

retained, held, purchased, bartered, traded, exchanged, sold or attempted to be purchased, bartered, traded, exchanged or sold.

\* \* \*

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(10), R.S. 56:326(E)(2), R.S. 56:326.1, R.S. 56:326.3, and R.S. 56:320.2(C), and R.S. 325.2(A).

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 25:543 (March 1999), amended LR 27:2267 (December 2001), amended LR \_\_\_\_\_.

Interested persons may submit comments relative to the proposed Rule to: Randy Pausina, Marine Fisheries Division, Department of Wildlife and Fisheries, Box 98000, Baton Rouge, LA 70898-9000, prior to Thursday, April 8, 2004.

The Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

In accordance with Act#1183 of 1999, the Department of Wildlife and Fisheries/Wildlife and Fisheries Commission hereby issues its Family Impact Statement in connection with the preceding Notice of Intent: This Notice of Intent will have no impact on the six criteria set out at R.S. 49:972(B).

Bill A. Busbice, Jr.  
Chairman

Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead was also handled by Mr. Randy Pausina. Act 1316 of the 1995 Legislature has that if the spawning potential ratio for the four species falls below 30 percent, the Department shall close the season within 2 weeks for a period of at least one year. The Marine Finfish Program collects the data needed to conduct these models. The data was collected through several different projects, such as the Fisheries Independent Monitoring Program which collects over 1700 different gill net, seine and trammel net samples; Marine Recreational Fisheries Statistical Survey which estimates recreational landings; the Trip Ticket Program which produces 500,000 reports each year which estimates commercial landings; and the age and growth labs that collect over 4,000 otoliths which allows the fish to be aged. All of this data needs to be continued long term in order to produce the stock assessments with a high level of confidence, added Mr. Pausina. The lowest value for natural mortality on

sheepshead was 45-66 percent SPR and the highest value showed a 64-92 percent SPR. With the Southern Flounder, the lowest mortality range was 27-29 percent SPR and the highest mortality range was 50-54 percent. Striped mullet, the low mortality was 31-38 percent and the high value was 62-74 percent. Finally with Black Drum, the low range was 44 percent and the high was 57-66 percent SPR. These assessments were sent for peer review but only one comment was received. The ranges for the Spawning Potential Ratios have been consistent with the past several years and the species remain in relatively good shape. Mr. Pausina then asked the Commission to approve the stock assessment reports so they could be forwarded to the State Legislature by March 1. Commissioner Stone asked if the data was ever used to change rules or to make recommendations. Mr. Pausina answered yes, it was used to change the southern flounder recreational and commercial regulations. Commissioner Felterman made a motion to submit the stock assessment reports to the Legislature as written. Commissioner Stone seconded the motion and it passed with no opposition.

Mr. Vince Guillory gave the **Derelict Crab Trap Removal Program Presentation**. He began stating they have heard the question, "what is a derelict crab trap?" many times and it has been defined as a trap that is not being actively fished. So, a trap can range from a new trap to an old smashed, encrusted trap. The issue was the derelict traps found in Louisiana's coastal waters and the solution could be to pick up the traps and transport them back to shore for disposal. However, there were a number of legal, landowner, fisheries and logistical issues that needed to be addressed. Mr. Guillory reminded the Commission Act 48 from the 2003 Legislature gave the Commission authority to establish a derelict crab trap removal program and the specifications for the program. Two time periods were established for the closure: a winter closure for 16 days between February 1 and March 31 and then a spring closure for 14 days to coincide with the opening of the spring inshore shrimp season. The Commission approved these regulations noting the spring closure included an area in western Vermilion Bay and the winter closure area would be in upper Terrebonne Bay estuary and shall run from February 28 - March 14, 2004. Other stipulations for the winter closure included: anyone can pick up the traps; the traps must be brought to designated disposal sites; the traps can not be taken out of the closure area; and the traps can only be removed during daylight hours. The next slide shown was the spring closure area in western Vermilion Bay consisting of 198,000 acres. Mr. Guillory did note that there are no crab traps allowed on State Wildlife Refuge and some of the interior marshes within that area. The winter closure area consists of 182,000 acres and was mostly privately owned. The two landowners in the area, except for some restricted places, will allow the public to go on their property to retrieve the derelict traps for disposal. Next, Mr. Guillory showed a map of the two closure areas as it relates to the entire Louisiana coast. The two areas chosen as closure areas were

relatively small, but were being used as part of a pilot study. What is learned from this year will be applied to future years.

In reference to the spring closure, the Vermilion Bay area would target deep water traps in open water and would be caught by shrimp fishermen in the process of shrimping. These shrimpers are being asked to bring these traps to designated disposal sites. A mail out to all shrimp and crab fishermen in the area and surrounding parishes on this program is planned for mid-March.

Turning to the winter closure, Mr. Guillory stated this closure would target shallow water traps in the marsh and bayous in the upper Terrebonne Bay. Those involved in the Steering Committee for the program included: Coastal Conservation Association (CCA), the Barataria-Terrebonne National Estuary Program (BTNEP), the Crab Task Force, Louisiana Wildlife Federation and LSU Sea Grant and LSU Cooperative Extension Service. Funding for the project will come from the NOAA Habitat Restoration Center, State Funds from the Crab Task Force from leftover monies from a Section 201 appeal, the Gulf States Marine Fisheries Commission by coordinating a federal aid project for all states in the Gulf, and the two landowners-Louisiana Land & Exploration and Apache Minerals, Inc. Also, those areas that are restricted have been asked to participate in the retrieval of derelict traps. Publicity on the program has been very important with several News Releases put out by the Department, newspaper and magazine articles, interviews by members of the Steering Committee on the radio and distribution of brochures and volunteer instruction sheets. Two media events that will occur include: CCA is sponsoring a Pre-Trap Sweep Media Day on February 17 and then on February 28, media would be invited to observe the program at Pointe-aux-Chenes Marina. The four disposal sites for the winter closure are Cozy Campers on Robinson Canal, Seabreeze Marina on Bayou Terrebonne, Pointe-aux-Chenes Marina and Josh's Marina on Catfish Lake. Dumpsters would be contracted and placed at the disposal sites. Department personnel will assist volunteers with supplies and instructions on two primary days during the season-February 28 and March 6 with March 13 being set aside as a bad weather day. The Department will be responsible for collecting data on the number of traps, volunteer hours and volunteer expenses. Mr. Guillory closed his presentation stating the derelict crab trap sweeps work with over 17,000 being collected from the Gulf of Mexico in 2002 and 2003.

Commissioner Broussard asked how would the spring closure line be defined in the Vermilion Bay area? Mr. Guillory stated the Vermilion Bay area is well defined and anyone collecting the traps cannot possess them outside of the closure area. Commissioner Stone asked if it has been arranged for the traps to be ferried from a shrimpers boat to the drop off sites? Mr. Guillory answered a barge would be placed at State Wildlife Refuge. Commissioner Stone felt if there was a volunteer group or an agent that could ferry the traps, it could be a big help. Commissioner Felterman

commented that a shrimper at the north end of Vermilion Bay would not run to the south end to get rid of several traps. Commissioner Stone asked that it be encouraged for shrimpers to keep the traps on their boats until they could be disposed of. Mr. Guillory stated that shrimpers can carry unserviceable traps outside of the closure areas back to shore; however, a volunteer not shrimping has to retain all traps picked up within a closure area. Commissioner Stone asked if the shrimper has to abide by certain rules to keep the traps onboard? Mr. Guillory stated it has to be unserviceable, but if it is serviceable, a shrimper can throw it overboard with a white float or bring it back to designated sites. Again Commissioner Stone suggested there was a need to meet the shrimpers. Chairman Busbice stated this program needed to happen and with this being the first year, there would be problems that needed addressing. Mr. Guillory acknowledged there would be problems to address, but with the reception received, he felt it would be successful.

Mr. Jeff Angers, CCA, complimented Mr. Guillory and the Crab Task Force for their hard work on the program. He noted this would be an opportunity for everyone that has complained about the traps in the waters to get involved. Mr. Angers then stated that on the night of February 27, there would be a jambalaya dinner and drinks for the volunteers.

Ending this discussion, Commissioner Felterman asked that Atchafalaya Bay be included in the plan in the future. Mr. Guillory commented there will be the option to select any area.

Mr. Tommy Prickett announced that Mr. John Sturgis was not available to give the **Hunter Safety Report** and would have to be rescheduled. From July 1 to December 31, 2003, 15,689 people were hunter safety certified and of that total, 353 were certified with the new computer program. An additional 1,425 bowhunters were certified. Commissioner Felterman commented this was a great program.

**Public Information Update Presentation** given by Ms. Marianne Burke would cover the last two quarters of 2003. There were three Louisiana Conservationist Magazines plus the Calendar issue of the Conservationist published. Also, the regulations and pamphlets published included the Hunting Migratory Birds, Trapping Regulations, Recreational Fishing and Commercial Fishing and Fishing for Fun. Special events noted were from the Sportsman's Paradise Expo and National Hunting and Fishing Day. Media coverage was on Atchafalaya Basin size limits with Tim Morrison. In-house video covered the Enforcement Cadet Commencement for 2003, the 2004 ACI Conference, Nuisance Black Bear Conditioning and the Louisiana Joint Enforcement Agreement. The Information and Resource Library had 2,531 visitors. There were 566 e-mail information requests received; 373 phone requests and 88 requests by standard mail. The



Reception Desk logged 8,545 phone calls and 3,879 visitors. Ms. Burke then talked about the projector and microphone upgrade that occurred in the Louisiana Room. Chairman Busbice noted a great job by the Section. Commissioner Mouton felt the new podium was an added plus for the Louisiana Room.


The Commissioners agreed to hold the **June 2004 Meeting** on Tuesday, June 8, 2004, beginning at 10:00 a.m. at the Baton Rouge Headquarters.

Chairman Busbice asked Mr. Bennie Fontenot when would they be meeting at Booker Fowler and requested an update on the hatchery's litigation at the next meeting. Mr. Fontenot invited the Commissioners to the Inland Fish Division's meeting at 9 AM on March 17 at Booker Fowler. He stated they could visit the hatchery and see how staff handles lake management. Commissioner Felterman commented with the next meeting being at Toledo Bend, it would give some people the opportunity to visit Booker Fowler Fish Hatchery.

Chairman Busbice then asked for **Public Comments**. Mr. Joe McKeith with the Louisiana Chapter of the Wild Turkey Federation thanked Secretary Landreneau for attending their state banquet. He added they look forward to working further with the Commission and the Secretary in the future.

Mr. Phil Bowman reminded the Commission the March meeting was when the recommendations for the upcoming hunting season were presented. Since the March meeting would be at Toledo Bend, a special public hearing would be held in Baton Rouge for this area's hunters. Also, Mr. Bowman stated there would be several special reports on waterfowl and deer management presented at future meetings.

There being no further business, Commissioner Mouton made a motion to **Adjourn** the meeting and it was seconded by Commissioner Felterman.

  
\_\_\_\_\_  
Dwight Landreneau  
Secretary

DL:scf

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

RECEIPT

DATE: 2-27-04

RECEIPT OF: 2004 Reports on Striped Mullet, Black Drum, Sheepshead and Southern Flounder.

**SENATE PRESIDENT** (State Capitol/Senate Sub-Basement)

RECEIVED BY: Laverne Moore

FOR SENATOR DON HINES, SENATE PRESIDENT

**HOUSE SPEAKER** (State Capitol/1st Floor)

RECEIVED BY: Joe Salter 2/27/04

FOR REPRESENTATIVE JOE SALTER, HOUSE SPEAKER

**SENATE NATURAL RESOURCES COMMITTEE** (State Capitol/Senate Sub-Basement)

RECEIVED BY: Sen Attus 2/29/04

FOR SENATOR MAX MALONE, CHAIRMAN, SENATE NATURAL RESOURCES COMMITTEE

**HOUSE NATURAL RESOURCES COMMITTEE** (State Capitol/10th Floor)

RECEIVED BY: Wilfred Pierre

FOR REPRESENTATIVE WILFRED PIERRE, CHAIRMAN, HOUSE NATURAL RESOURCES COMMITTEE

# State of Louisiana



Dwight Landreneau  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800

Kathleen Babineaux Blanco  
Governor

February 26, 2004

Honorable Donald E. Hines, M.D.  
Senate President  
Post Office Box 94183  
Baton Rouge, LA 70804

Honorable Max T. Malone, Chairman  
Senate Committee on Natural Resources  
Post Office Box 94183  
Baton Rouge, LA 70804

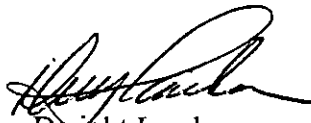
Honorable Joe R. Salter  
Speaker of the House  
Post Office Box 94062  
Baton Rouge, LA 70804

Honorable Wilfred Pierre, Chairman  
House Committee on Natural Resources  
Post Office Box 44486  
Baton Rouge, LA 70804

Gentlemen:

In compliance with R.S. 56:325.4(D)1 and R.S. 56:333(G)1, enclosed are the annual reports on striped mullet, black drum, sheepshead and southern flounder which include stock assessments and spawning potential ratios. Bioprofiles were not included since there were no substantive changes from last year. Also included are comments received from peer review. These reports were adopted by the Louisiana Wildlife and Fisheries Commission at its February 5, 2004 meeting.

Sincerely,



Dwight Landreneau  
Secretary

scf

Enclosures

2/16/2004

Marianne,

Please review.

Thanks,

Susan

B 2/17/04

MINUTES OF THE MEETING

OF

WILDLIFE AND FISHERIES COMMISSION

Thursday, February 5, 2004

Jr. presiding.

Jerry Stone

Secretary Dwight Landreneau was also present.

Commissioners Terry Denmon and Wayne Sagrera were absent from the meeting.

Chairman Busbice called for a motion for approval of the **January 8, 2004 Commission Minutes**. A motion for approval was made by Commissioner Mouton and seconded by Commissioner Felterman. The motion passed with no opposition.

Under **Commission Special Announcements** for this month, Commissioner Mouton stated he was hearing from residents of Mississippi they want to come fish in the Chandeleurs at a greatly reduced cost or at no cost at all. He felt if they did not want to pay for a Louisiana license, they should stay in Mississippi. Also Commissioner Mouton requested the Commission "stand tall" and make them pay the fee if this issue was presented.

Chairman Busbice then introduced Mr. Dwight Landreneau as being the recently appointed Secretary for the Department of Wildlife and Fisheries. Secretary Landreneau stated it was a pleasure to serve as Secretary for the Department and looked forward to working with the Commission in facing the natural resource challenges that everyone helps to protect and are used by the people of this State. Secretary Landreneau commented that Governor Blanco is interested in the stewardship of the natural resources and will be involved with the Department. He then stated he looks forward to working with the Commission over the next four years to make sure the needs of the public are met.

**Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association** was handled by Mr. Tommy Prickett. Ms. Angela Capella, an educator from Region 3, works at the Booker Fowler Fish Hatchery and has developed a public visitor center and program there. These programs are directed at young people particularly in

the education system. Recently Ms. Capella was given an award as the Outstanding Informal Educator in the State of Louisiana by the Louisiana Science Teachers Association. Mr. Prickett then noted that Ms. Capella is the President of the Louisiana Environmental Educators Association and the Department's representative on the Southern Association of Marine Educators. One program Ms. Capella has developed was raising paddlefish in the classroom which helps the teachers as it counts toward part of a child's curriculum. Mr. Prickett then presented a plaque to Ms. Capella.

Chairman Busbice suggested to his fellow Commissioners they should visit the Booker Fowler Fish Hatchery and felt it was a good place for those interested in bass fishing to go to. Commissioner Felterman agreed that it was a great place to visit.

The **Monthly Law Enforcement Report for January** was given by Major Keith LaCaze. The following numbers were issued during January.

Region I - Minden - 100 citations and 10 warnings.

Region II - Monroe - 62 citations, 4 warnings and 5 public assists.

Region III - Alexandria - 74 citations and 1 warning.

Region IV - Ferriday - 64 citations and 8 public assists.

Region V - Lake Charles - 105 citations, 1 warning and 2 public assists.

Region VI - Opelousas - 118 citations and 19 warnings.

Region VII - Baton Rouge - 142 citations, 6 warnings and 6 public assists.

Region VIII - New Orleans - 222 citations, 24 warnings and 1 public assist.

Region IX - Schriever - 162 citations, 24 warnings and 4 public assists.

Oyster Strike Force - 34 citations.

Seafood Investigation Unit - 19 citations.

SWEP - 26 citations.

Refuge Patrol - 35 citations and 7 public assists.

The grand total of citations issued statewide for the month of January was 1,049. Also 89 warning citations were issued and agents helped in 26 public assist cases.

The aviation report for January 2004 showed enforcement pilots flew three airplanes a total of 70.7 hours for enforcement and 24.5 hours for other divisions. No citations were issued.

Major LaCaze then stated Operation Game Thief met recently to review cases from their quarterly reports as well as it being their Annual Meeting. For the quarter, rewards were paid on 16 cases which totaled \$6,500. For the year 2003, \$11,500 was paid out in rewards and the total paid out since inception is \$174,600. Copies of News Releases were given to the Commissioners. Major LaCaze then reported on one News Release where an agent and several residents rescued 6 people, not wearing PFD's, from an overturned boat. All of those rescued survived the ordeal. Commissioner Felterman asked if more people were night hunting now or were more cases being made? Major LaCaze felt more people were night hunting now which occurs in 3 year cycles. Commissioner Felterman asked what are the basis for confiscating trucks? Major LaCaze thought they were from night hunting cases. He added that anything in connection with the violation could be seized and the courts would decide if it would be forfeited to the Department. Commissioner Stone noticed that as the night hunting cases were increasing, the drug confiscations were decreasing. Chairman Busbice again stated he would like to see a mandatory jail sentence or community service handed to those night hunting violators. He then advised Secretary Landreneau he would like to meet with both he and the Governor to talk about this issue. Commissioner Mouton told of a case where a night hunter on drugs was caught by Texas wardens and they relayed how dangerous the situation could have been.

Chairman Busbice then asked if there have been any fatalities? Major LaCaze noted during the past hunting season, there were 15 cases for hunting or discharging firearms from public roads, 92 for standing or hunting in a public road, 11 for discharging firearms or hunting from a levee, 163 for hunting or taking a deer from public road and 232 cases for failure to wear hunter orange. He then stated there was one fatality in Region 9 by someone rabbit hunting. Commissioner Mouton suggested the Chairman send a letter to District Attorney's asking that the night hunting cases be prosecuted. Chairman Busbice asked Major LaCaze to prepare a letter for his signature.

Chairman Busbice then introduced Mrs. Janice Lansing as the new Undersecretary for the Department. He also stated he looked forward to working with her in the future.

**Notice of Intent - Shark Harvest Regulations** began with Mr. Randy Pausina stating this proposed rule would modify the shark

rules. This modification would clarify existing language and attempted to maintain consistency with federal regulations for both commercial and recreational fishermen in Federal and State waters. These actions would ensure the regulations complement federal rules in waters beyond the Territorial Sea and to assist in identifying shark species. Commissioner Mouton asked about an overlap with the season in federal and state waters. Mr. Pausina stated that change would not become effective until the 2005 shark season, so there was still time to work out the details. Commissioner Mouton asked that he be kept informed of the situation. He then read the Therefore Be It Resolved portion of the Resolution. Commissioner Broussard made a motion to accept the Resolution and it was seconded by Commissioner Mouton. The motion passed with no opposition.

(The full text of the Resolution and Notice of Intent are made a part of the record.)

#### RESOLUTION

##### MODIFICATION OF SHARK HARVEST RULES

adopted by the  
Louisiana Wildlife and Fisheries Commission  
February 5, 2004

- WHEREAS, regulations promulgated by the Louisiana Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, have provided rules for the harvesting of sharks in Louisiana's state waters, and
- WHEREAS, NMFS has adopted management measures for sharks harvested in the EEZ off of Louisiana, and
- WHEREAS, adoption of compatible regulations for Louisiana state waters where feasible would enhance effectiveness and enforceability of the regulations already in place for sharks harvested in the EEZ off of Louisiana, and
- WHEREAS, substantial fisheries for sharks do also occur in Louisiana state waters that are significant to the citizens of the State of Louisiana and thus enactment of compatible regulations may also impact those persons involved in those fisheries, and
- WHEREAS, R.S. 56:6(10), 56:326(E)(2), 56:326.1, and 56:326.3 provide authority for adoption of this rule through the Wildlife and Fisheries Commission, and
- WHEREAS, R.S. 56:325.2(A) provides that all sharks possessed by a recreational fisherman shall be maintained with head and

fins intact and shall not be skinned until set or put on shore,

THEREFORE BE IT RESOLVED, that the Wildlife and Fisheries Commission hereby promulgates a Notice of Intent to modify existing regulations to incorporate federal law and regulation changes for sharks as part of the state regulations, clarifies the existing rule, and

BE IT FURTHER RESOLVED, the complete copy of the Notice of Intent and proposed rule are attached to and made part of this resolution, and

BE IT FURTHER RESOLVED, that this Rule shall become effective upon promulgation, and

BE IT FURTHER RESOLVED, that the Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

Bill A. Busbice, Jr., Chairman  
Wildlife and Fisheries  
Commission

Dwight Landreneau, Secretary  
Department of Wildlife and  
Fisheries

#### NOTICE OF INTENT

Department of Wildlife and Fisheries  
Wildlife and Fisheries Commission

#### Sharks and Sawfishes

The Wildlife and Fisheries Commission does hereby give notice of its intent to amend a Rule, LAC 76:VII.357, modifying the existing rule. Authority for adoption of this Rule is included in R.S. 56:6(10), 56:320.2(C), 56:325.2 (A), 56:326.1, 56:326.3, and 56:326(E)(2). Said Rule is attached to and made a part of this Notice of Intent.

#### Title 76

#### WILDLIFE AND FISHERIES

#### Part VII. Fish and Other Aquatic Life

#### Chapter 3. Saltwater Sport and Commercial Fishery



### §357. Sharks and Sawfishes - Harvest Regulations

A. The following rules and regulations are established for the taking and possession of sharks (including sawfishes) (Class Elasmobranchiomorphi: Orders Hexanchiformes, Lamniformes, Squaliformes, and Rajiformes) from within or without Louisiana waters. The provisions of this Section shall not apply to shrimp or menhaden harvest, and nothing contained herein is intended or shall be construed to repeal, amend, or otherwise modify the provisions of law applicable to shrimp or menhaden fishing, except for provisions:

1. outlawing finning of shark;
2. requiring a Commercial State Shark Permit "~~Shark Permit~~" for sale, barter, trade, or exchange;

\* \* \*

B. For management purposes, sharks are divided into the following categories:

1. Small Coastal Sharks - Bonnethead shark, Atlantic sharpnose shark, ~~B~~blacknose shark, ~~F~~finetooth shark.
2. Large Coastal Sharks - Great ~~H~~hammerhead, ~~S~~scalloped ~~H~~hammerhead, ~~S~~smooth ~~H~~hammerhead, ~~N~~nurse shark, ~~B~~blacktip shark, ~~B~~bull shark, ~~E~~lemon shark, ~~S~~sandbar shark, ~~S~~silky shark, ~~S~~spinner shark, ~~T~~tiger shark.
3. Pelagic Sharks - Porbeagle shark, ~~S~~shortfin mako, ~~B~~blue shark, ~~O~~ceanic whitetip shark, ~~T~~hresher shark.
4. Prohibited Species - Basking shark, ~~W~~white shark, ~~B~~bigeye sand tiger, ~~S~~sand tiger, ~~W~~hale shark, ~~S~~smalltooth sawfish, ~~E~~largetooth sawfish, Atlantic angel shark, Caribbean sharpnose shark, ~~S~~smalltail shark, ~~B~~ignose shark, Caribbean reef shark, ~~D~~usky shark, Galapagos shark, ~~N~~narrowtooth shark, ~~N~~ight shark, ~~B~~bigeye sixgill shark, ~~B~~bigeye thresher shark, ~~E~~longfin mako, ~~S~~sevengill shark, ~~S~~sixgill shark.

C. In addition to all other licenses and permits required by law, a valid original Commercial State Shark Permit "~~Shark Permit~~" shall be annually required for persons commercially taking shark from Louisiana waters and for persons selling, exchanging, or bartering sharks as required by law; the valid original permit shall be in immediate possession of the permittee while engaged in fishing for, possessing, selling, bartering, trading, or exchanging shark.

D. No person shall purchase, sell, exchange, barter or attempt to purchase, sell, exchange, or barter any sharks in excess

of any possession limit for which a state or federal commercial permit was issued.

E. 1. All persons who do not possess a Commercial State Shark Permit ~~"Shark Permit"~~ issued by the Department of Wildlife and Fisheries, and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~Shark Permit~~ issued by the National Marine Fisheries Service, are limited to a recreational possession limit. All persons who do not possess a Louisiana Commercial State Shark Permit ~~"Shark Permit"~~ and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~permit~~ issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks, shall not sell, barter, trade, exchange or attempt to sell, barter, trade or exchange any sharks, or possess any sharks in excess of a recreational possession limit. Sharks taken incidental to menhaden fishing, that are retained on the vessel as part of the harvest, may be retained and sold only as a mixed part of the total harvest, and shall not be retained, held, or sold, purchased, bartered, traded, or exchanged separately. Sharks retained as a result of menhaden fishing shall not exceed legal bycatch allowances for menhaden fishing as provided for in R.S. 56:324.

2. Legally licensed Louisiana wholesale/retail seafood dealers, retail seafood dealers, restaurants, and retail grocers are not required to hold a Commercial State Shark Permit ~~"Shark Permit"~~ in order to purchase, possess, exchange, barter and sell any quantities of sharks, so long as they maintain records as required by R.S. 56:306.5 and R.S. 56:306.6.

F. Sharks taken under a recreational bag limit shall not be sold, purchased, exchanged, traded, bartered, or attempted to be sold, purchased, exchanged, traded, or bartered. A person subject to a bag limit shall not possess at any time, regardless of the number of trips or the duration of a trip, any shark in excess of the recreational bag limits or less than minimum size limits as follows:

1. All sharks taken under a recreational bag limit within or without Louisiana waters must be at least 54 inches fork length, except that the minimum size limit does not apply for Atlantic sharpnose or bonnethead sharks.

2. Owners/operators of vessels other than those taking sharks in compliance with a state or federal commercial permit are restricted to No no more than one shark from either the large coastal, small coastal or pelagic group not taken under a commercial permit may be retained per vessel per trip within or without Louisiana waters, subject to the size limits described in LAC 76:VII.357(F)1, and, in addition, no person shall possess more than one Atlantic sharpnose shark and one bonnethead shark may be retained per person per trip within or without Louisiana waters.

~~Regardless of the length of a trip, no more than one Atlantic sharpnose shark per person may be possessed.~~

3. All owners/operators of vessels recreationally fishing for and/or retaining regulated Atlantic Highly Migratory Species (Atlantic tunas, sharks, swordfish and billfish) in or from the EEZ must obtain and possess a Federal Atlantic Highly Migratory Species Angling permit.

G. Those persons possessing a Federal Commercial Directed or Incidental Limited Access Shark Permit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks are limited to daily take, trip and possession limits as specified in that Federal Permit. Regardless of where fishing a A person aboard a vessel for which a Federal Shark Permit has been issued shall not retain, possess, barter, trade, or exchange shark of any species group for which the commercial quota has been reached and the season closed in Federal waters.

H. 1. A vessel that has been issued or possesses a federal Commercial Directed or Incidental Limited Access sShark pPermit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of the designated trip limits, as established under the Atlantic Highly Migratory Species Plan and published in the Federal Register, 4,000 pounds, dressed weight regardless of where taken. No person shall purchase, barter, trade, or exchange shark in excess of the designated trip limits 4,000 pounds, dressed weight, or from any person who does not possess a Louisiana Commercial State Shark Permit shark permit or fFederal Commercial Directed or Incidental Limited Access pPermit, if applicable.

2. Persons possessing a Commercial State Shark Permit Louisiana "Shark Permit" shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of 4,000 pounds, dressed weight, taken from Louisiana state waters.

3. Wholesale/retail seafood dealers who receive, purchase, trade for, or barter for Atlantic sharks, taken from the EEZ, from a fishing vessel must possess a valid Federal Dealer Permit.

I. A person aboard a vessel for which a fFederal Commercial Directed or Incidental Limited Access sShark pPermit has been issued, or persons aboard a vessel fishing for or possessing shark in the EEZ shall comply with all applicable federal regulations.

J. Fins

\* \* \*

2. ~~Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are disproportionate to the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered. All sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore.~~

3. ~~Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing. Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are in excess of 5 percent of the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered.~~

4. Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing.

5. All mako sharks possessed aboard a commercial fishing vessel shall have fins intact.

\* \* \*

#### M. Seasonal Closures

1. All Louisiana State waters out to the seaward boundary of the Louisiana Territorial Sea shall be closed to the recreational and commercial harvest of all sharks between April 1 and June 30 of each year. A holder of a Federal Commercial Directed or Incidental Limited Access Shark Permit may legally harvest sharks from Federal waters beyond the Louisiana Territorial Sea and bring those sharks into Louisiana waters for sale within the provisions of that Federal Shark Permit. Effective with this closure, no person shall commercially harvest, purchase, barter, trade, sell or attempt to purchase, barter, trade or sell sharks from the closed area. Effective with the closure, no person shall retain or possess any sharks in the closed area. Sharks taken incidental to shrimp or menhaden fishing in the closed area, that are retained on the vessel as part of the harvest, may be retained only as a mixed part of the total harvest, and shall not be

retained, held, purchased, bartered, traded, exchanged, sold or attempted to be purchased, bartered, traded, exchanged or sold.

\* \* \*

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(10), R.S. 56:326(E)(2), R.S. 56:326.1, R.S. 56:326.3, and R.S. 56:320.2(C), and R.S. 325.2(A).

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 25:543 (March 1999), amended LR 27:2267 (December 2001), amended LR.

Interested persons may submit comments relative to the proposed Rule to: Randy Pausina, Marine Fisheries Division, Department of Wildlife and Fisheries, Box 98000, Baton Rouge, LA 70898-9000, prior to Thursday, April 8, 2004.

The Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

In accordance with Act#1183 of 1999, the Department of Wildlife and Fisheries/Wildlife and Fisheries Commission hereby issues its Family Impact Statement in connection with the preceding Notice of Intent: This Notice of Intent will have no impact on the six criteria set out at R.S. 49:972(B).

Bill A. Busbice, Jr.  
Chairman

**Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead** was also handled by Mr. Randy Pausina. Act 1316 of the 1995 Legislature has that if the spawning potential ratio for the four species falls below 30 percent, the Department shall close the season within 2 weeks for a period of at least one year. The Marine Finfish Program collects the data needed to conduct these models. The data was collected through several different projects, such as the Fisheries Independent Monitoring Program which collects over 1700 different gill net, seine and trammel net samples; Marine Recreational Fisheries Statistical Survey which estimates recreational landings; the Trip Ticket Program which produces 500,000 reports each year which estimates commercial landings; and the age and growth labs that collect over 4,000 otoliths which allows the fish to be aged. All of this data needs to be continued long term in order to produce the stock assessments with a high level of confidence, added Mr. Pausina. The lowest value for natural mortality on

sheepshead was 45-66 percent SPR and the highest value showed a 64-92 percent SPR. With the Southern Flounder, the lowest mortality range was 27-29 percent SPR and the highest mortality range was 50-54 percent. Striped mullet, the low mortality was 31-38 percent and the high value was 62-74 percent. Finally with Black Drum, the low range was 44 percent and the high was 57-66 percent SPR. These assessments were sent for peer review but only one comment was received. The ranges for the Spawning Potential Ratios have been consistent with the past several years and the species remain in relatively good shape. Mr. Pausina then asked the Commission to approve the stock assessment reports so they could be forwarded to the State Legislature by March 1. Commissioner Stone asked if the data was ever used to change rules or to make recommendations. Mr. Pausina answered yes, it was used to change the southern flounder recreational and commercial regulations. Commissioner Felterman made a motion to submit the stock assessment reports to the Legislature as written. Commissioner Stone seconded the motion and it passed with no opposition.

Mr. Vince Guillory gave the **Derelict Crab Trap Removal Program Presentation**. He began stating they have heard the question, "what is a derelict crab trap?" many times and it has been defined as a trap that is not being actively fished. So, a trap can range from a new trap to an old smashed, encrusted trap. The issue was the derelict traps found in Louisiana's coastal waters and the solution could be to pick up the traps and transport them back to shore for disposal. However, there were a number of legal, landowner, fisheries and logistical issues that needed to be addressed. Mr. Guillory reminded the Commission Act 48 from the 2003 Legislature gave the Commission authority to establish a derelict crab trap removal program and the specifications for the program. Two time periods were established for the closure: a winter closure for 16 days between February 1 and March 31 and then a spring closure for 14 days to coincide with the opening of the spring inshore shrimp season. The Commission approved these regulations noting the spring closure included an area in western Vermilion Bay and the winter closure area would be in upper Terrebonne Bay estuary and shall run from February 28 - March 14, 2004. Other stipulations for the winter closure included: anyone can pick up the traps; the traps must be brought to designated disposal sites; the traps can not be taken out of the closure area; and the traps can only be removed during daylight hours. The next slide shown was the spring closure area in western Vermilion Bay consisting of 198,000 acres. Mr. Guillory did note that there are no crab traps allowed on State Wildlife Refuge and some of the interior marshes within that area. The winter closure area consists of 182,000 acres and was mostly privately owned. The two landowners in the area, except for some restricted places, will allow the public to go on their property to retrieve the derelict traps for disposal. Next, Mr. Guillory showed a map of the two closure areas as it relates to the entire Louisiana coast. The two areas chosen as closure areas were

relatively small, but were being used as part of a pilot study. What is learned from this year will be applied to future years.

In reference to the spring closure, the Vermilion Bay area would target deep water traps in open water and would be caught by shrimp fishermen in the process of shrimping. These shrimpers are being asked to bring these traps to designated disposal sites. A mail out to all shrimp and crab fishermen in the area and surrounding parishes on this program is planned for mid-March.

Turning to the winter closure, Mr. Guillory stated this closure would target shallow water traps in the marsh and bayous in the upper Terrebonne Bay. Those involved in the Steering Committee for the program included: Coastal Conservation Association (CCA), the Barataria-Terrebonne National Estuary Program (BTNEP), the Crab Task Force, Louisiana Wildlife Federation and LSU Sea Grant and LSU Cooperative Extension Service. Funding for the project will come from the NOAA Habitat Restoration Center, State Funds from the Crab Task Force from leftover monies from a Section 201 appeal, the Gulf States Marine Fisheries Commission by coordinating a federal aid project for all states in the Gulf, and the two landowners-Louisiana Land & Exploration and Apache Minerals, Inc. Also, those areas that are restricted have been asked to participate in the retrieval of derelict traps. Publicity on the program has been very important with several News Releases put out by the Department, newspaper and magazine articles, interviews by members of the Steering Committee on the radio and distribution of brochures and volunteer instruction sheets. Two media events that will occur include: CCA is sponsoring a Pre-Trap Sweep Media Day on February 17 and then on February 28, media would be invited to observe the program at Pointe-aux-Chenes Marina. The four disposal sites for the winter closure are Cozy Campers on Robinson Canal, Seabreeze Marina on Bayou Terrebonne, Pointe-aux-Chenes Marina and Josh's Marina on Catfish Lake. Dumpsters would be contracted and placed at the disposal sites. Department personnel will assist volunteers with supplies and instructions on two primary days during the season-February 28 and March 6 with March 13 being set aside as a bad weather day. The Department will be responsible for collecting data on the number of traps, volunteer hours and volunteer expenses. Mr. Guillory closed his presentation stating the derelict crab trap sweeps work with over 17,000 being collected from the Gulf of Mexico in 2002 and 2003.

Commissioner Broussard asked how would the spring closure line be defined in the Vermilion Bay area? Mr. Guillory stated the Vermilion Bay area is well defined and anyone collecting the traps cannot possess them outside of the closure area. Commissioner Stone asked if it has been arranged for the traps to be ferried from a shrimpers boat to the drop off sites? Mr. Guillory answered a barge would be placed at State Wildlife Refuge. Commissioner Stone felt if there was a volunteer group or an agent that could ferry the traps, it could be a big help. Commissioner Felterman

commented that a shrimper at the north end of Vermilion Bay would not run to the south end to get rid of several traps. Commissioner Stone asked that it be encouraged for shrimpers to keep the traps on their boats until they could be disposed of. Mr. Guillory stated that shrimpers can carry unserviceable traps outside of the closure areas back to shore; however, a volunteer not shrimping has to retain all traps picked up within a closure area. Commissioner Stone asked if the shrimper has to abide by certain rules to keep the traps onboard? Mr. Guillory stated it has to be unserviceable, but if it is serviceable, a shrimper can throw it overboard with a white float or bring it back to designated sites. Again Commissioner Stone suggested there was a need to meet the shrimpers. Chairman Busbice stated this program needed to happen and with this being the first year, there would be problems that needed addressing. Mr. Guillory acknowledged there would be problems to address, but with the reception received, he felt it would be successful.

Mr. Jeff Angers, CCA, complimented Mr. Guillory and the Crab Task Force for their hard work on the program. He noted this would be an opportunity for everyone that has complained about the traps in the waters to get involved. Mr. Angers then stated that on the night of February 27, there would be a jambalaya dinner and drinks for the volunteers.

Ending this discussion, Commissioner Felterman asked that Atchafalaya Bay be included in the plan in the future. Mr. Guillory commented there will be the option to select any area.

Mr. Tommy Prickett announced that Mr. John Sturgis was not available to give the **Hunter Safety Report** and would have to be rescheduled. From July 1 to December 31, 2003, 15,689 people were hunter safety certified and of that total, 353 were certified with the new computer program. An additional 1,425 bowhunters were certified. Commissioner Felterman commented this was a great program.

**Public Information Update Presentation** given by Ms. Marianne Burke would cover the last two quarters of 2003. There were three Louisiana Conservationist Magazines plus the Calendar issue of the Conservationist published. Also, the regulations and pamphlets published included the Hunting Migratory Birds, Trapping Regulations, Recreational Fishing and Commercial Fishing and Fishing for Fun. Special events noted were from the Sportsman's Paradise Expo and National Hunting and Fishing Day. Media coverage was on Atchafalaya Basin size limits with Tim Morrison. In-house video covered the Enforcement Cadet Commencement for 2003, the 2004 ACI Conference, Nuisance Black Bear Conditioning and the Louisiana Joint Enforcement Agreement. The Information and Resource Library had 2,531 visitors. There were 566 e-mail information requests received; 373 phone requests and 88 requests by standard mail. The



Reception Desk logged 8,545 phone calls and 3,879 visitors. Ms. Burke then talked about the projector and microphone upgrade that occurred in the Louisiana Room. Chairman Busbice noted a great job by the Section. Commissioner Mouton felt the new podium was an added plus for the Louisiana Room.

The Commissioners agreed to hold the **June 2004 Meeting** on Tuesday, June 8, 2004, beginning at 10:00 a.m. at the Baton Rouge Headquarters.

Chairman Busbice asked Mr. Bennie Fontenot when would they be meeting at Booker Fowler and requested an update on the hatchery's litigation at the next meeting. Mr. Fontenot invited the Commissioners to the Inland Fish Division's meeting at 9 AM on March 17 at Booker Fowler. He stated they could visit the hatchery and see how staff handles lake management. Commissioner Felterman commented with the next meeting being at Toledo Bend, it would give some people the opportunity to visit Booker Fowler Fish Hatchery.

Chairman Busbice then asked for **Public Comments**. Mr. Joe McKeith with the Louisiana Chapter of the Wild Turkey Federation thanked Secretary Landreneau for attending their state banquet. He added they look forward to working further with the Commission and the Secretary in the future.

Mr. Phil Bowman reminded the Commission the March meeting was when the recommendations for the upcoming hunting season were presented. Since the March meeting would be at Toledo Bend, a special public hearing would be held in Baton Rouge for this area's hunters. Also, Mr. Bowman stated there would be several special reports on waterfowl and deer management presented at future meetings.

There being no further business, Commissioner Mouton made a motion to **Adjourn** the meeting and it was seconded by Commissioner Felterman.

---

Dwight Landreneau  
Secretary

DL:scf



SEARCH



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- Traffic
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- Food
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2theadvocate > Outdoors > Wildlife and Fisheries program targets crab traps  
02/06/04

FEATU

## 2theadvocate Outdoors

### Wildlife and Fisheries program targets crab traps

By JOE MACALUSO  
jmacaluso@theadvocate.com  
Advocate outdoors writer

The program shaping the state's first venture into removing abandoned crab traps in coastal waters is attracting widespread volunteer support the Louisiana Wildlife and Fisheries Commission learned Thursday.

State biologist Vince Guillory, who heads the program for the Department of Wildlife and Fisheries, told the commission groups like the Coastal Conservation Association and the Louisiana Wildlife Federation are pairing with Barataria-Terrebonne Estuary Program, the state's Crab Task Force, LSU Sea Grant and the LSU Cooperative Extension Service in providing manpower for the Feb. 28 event.

Guillory said notices have been sent to crabbers in the Terrebonne Parish area they must have their traps out of the water by the Feb. 28 program date.

Guillory said all traps found in the target area in lower Terrebonne Parish between Feb. 27 and March 13 can be removed. He said four collection sites have been established where volunteers can dispose of the traps, and that Feb. 28 and March 6 will be the prime collection days for the Derelict Crab Trap Removal Program.

"Although volunteers can go an time during the two weeks, the two collection days will be better for them, because the Department of Wildlife and Fisheries will furnish supplies and instructions -- supplies like hooks, tarps, bags and gloves," Guillory said.

A second collection is scheduled for the western area of Vermilion Bay in May.

Guillory said similar programs have been established in Texas, Mississippi and Alabama and added 12,000 traps had been removed from Texas waters in 2002 and 2003. Mississippi took 3,630 and Alabama 1,570 during the past three years.

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Baton Rouge, La.  
Overcast  
50°

In other action, the LWFC voted in a Notice of Intent that will make Louisiana fall in line with new shark regulations from the National Marine Fisheries Service. The new regulations outlaw "finning" of sharks -- catching sharks and removing fins then discarding the remainder of the fish -- requires a commercial state shark permit, further delineates what sharks can and cannot be taken and that recreational anglers will be allowed to keep one shark per vessel per trip. There are further restrictions on size limits of certain sharks. The Notice of Intent will be ratified at the June 8 meeting in Baton Rouge.

The LWFC also learned that stocks of four saltwater species, sheepshead, black drum, southern flounder and striped mullet, are in "good" shape according to state marine fisheries biologists.

Flounder are the only species among the four with a "spawning potential ratio" under 30 percent. Biologists' reports that the low side of the scale for flounder was between 27 and 29 percent, while the high side was estimated at 50-64 percent. The "potential ratio" is the figure used by fisheries biologists to ascertain if there are enough adult fish in the population to continue the species at sustainable fishing levels. A SPR of 30 percent is considered adequate to fulfill this goal.

The LWFC also learned that LDWF enforcement agents issued 1,049 citations and 89 written warnings during January. The commission acknowledged LDWF employee Angela Capella, who works at the Booker Fowler Fish Hatchery for her work in tailoring education programs at the hatchery for use in school curricula around the state. The Louisiana Science Teachers Association honored Capella with its Informal Science Education Award.

The LWFC also voted to meet June 8 in Baton Rouge. Chairman Bill Busbice announced the site of the March 4 meeting at Toledo Bend will be the Wildwood Resort near Many.

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COMMISSION MEETING  
ROLL CALL

Thursday, February 5, 2004  
Baton Rouge, LA  
Wildlife & Fisheries Building

|                         | Attended | Absent   |
|-------------------------|----------|----------|
| Bill Busbice (Chairman) | <u>✓</u> | <u>—</u> |
| Lee Felterman           | <u>✓</u> | <u>—</u> |
| Terry Denmon            | <u>—</u> | <u>✓</u> |
| Billy Broussard         | <u>✓</u> | <u>—</u> |
| Wayne Sagrera           | <u>—</u> | <u>✓</u> |
| Jerry Stone             | <u>✓</u> | <u>—</u> |
| Henry Mouton            | <u>✓</u> | <u>—</u> |

Mr. Chairman:

There are 5 Commissioners in attendance and we have a quorum.  
Secretary Landreneau is also present.

AGENDA  
LOUISIANA WILDLIFE AND FISHERIES COMMISSION  
BATON ROUGE, LA  
February 5, 2004  
10:00 AM

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association - Tommy Prickett
5. Enforcement & Aviation Reports/January - Keith LaCaze
6. Notice of Intent - Shark Harvest Regulations - Randy Pausina
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead - Joey Shepard
8. Derelict Crab Trap Removal Program Presentation - Vince Guillory
9. Hunter Safety Report - John Sturgis
10. Public Information Update Presentation - Marianne Burke
11. Set June 2004 Meeting Date
12. Public Comments
13. Adjournment

AGENDA  
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BATON ROUGE, LA  
February 5, 2004  
10:00 AM

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- ✓ 11. Set June 2004 Meeting Date
- ✓ 12. Public Comments
13. Adjournment

## Potential Benefits of a Two-Buck Limit

Utilizing data from the 2002/03 Annual Harvest Survey, it is estimated that the two-buck limit would result in 22% of the present **antlered buck harvest** to be passed up by hunters and allowed to grow older. This figure could possibly be higher, due to hunters becoming even more selective than anticipated, resulting in perhaps a thirty percent saving of the present antlered buck harvest. The number of bucks potentially allowed to grow older would be 25,597 (using the 22% estimate).

Calculations are based upon the following data from the harvest survey:

- 1) 241,400 total deer harvested in 2002/03.
- 2) We estimate a harvest of 40% does, 12% antlerless bucks, 48% antlered bucks.
- 3) The antlered buck harvest for 2002/03 would be 115,872.
- 4) **85% of the deer hunters killed 2 or less deer**; this harvest would amount to 123,114 total deer. If 48% of these are antlered bucks, the antlered buck harvest would be 59,094. **Since these hunters are killing two or less deer, no bucks would be passed up and allowed to grow older. The two-buck limit would have no impact on 85% of the deer hunters.** However, the idea of hunters further restricting themselves could come into play here and some of these bucks may not be harvested.
- 5) **15% of the deer hunters killed 3 or more deer**; this harvest would amount to 118,286 total deer. If 48% of these are antlered bucks, the antlered buck harvest would be 56,777.
- 6) **The two buck limit could reduce this harvest of bucks, resulting in a potential saving of 25,597 bucks (22% of the present total buck harvest).** Again, hunter selectivity could result in an increased saving of additional bucks.
- 7) One added benefit of the two-buck limit would be that it might entice hunters to increase their harvest of does (something that needs to be done around the state).

David Moreland, Deer Program

Table 1. Continued.

| State | Limits                                    |   |   | Antler Restrictions <sup>6</sup> | % Hunting Success |              |          | Avg. Leasing Fees/Acre |
|-------|---|---|---|----------------------------------|-------------------|--------------|----------|------------------------|
|       | Season                                    | Antlerless                                | Antlered                                  |                                  | Archery           | Muzzleloader | Firearms |                        |
| AL    | None                                      | 2 per day                                 | 1 per day                                 | C (5 WMAs)                       | 25                | N/A          | 60       | \$5-16                 |
| AR    | 2/day*                                    | 1 or 2/day*                               | 2   | C                                | 23                | 20           | 57       | \$2-4                  |
| FL    | 2/day*                                    | 1 or 2/day*                               | 2/day*                                    | Some WMAs                        | NA                | NA           | NA       |                        |
| GA    | 12  | 10  | 2   | One buck must be 4-points/side   | 24                | 26           | 53       | \$5-15                 |
| KY    |   | varies                                    | 1   | 7 WMAs                           | 25                |              | 40       | N/A                    |
| LA    | 6   | None                                      | None                                      | Yes (C)                          | 29                | 29           | 54       | \$5-30                 |
| MD    |   | Regional                                  | Regional                                  | No                               | 61                | A-33, B-30   | 55       | \$5-35                 |
| MO    | varies                                    | varies                                    | 3; 1 with firearms                        | No                               | 30                | -            | 40       | \$2-10                 |
| MS    |   | 3   | 3   | A                                | 41                | 49           | 67       | \$2-5                  |
| NC    | 6   | up to 6                                   | *2/4                                      | NA                               | ?                 | ?            | ?        | \$2-6                  |
| OK    | Gun                                       | 1   | 1   | No                               | 16                | 22           | 37       | \$2-5                  |
| SC    | 15+                                       | 10+                                       | 5+  | C-5 WMAs                         | N/A               | N/A          | 76.7     | \$4-10+                |
| TN    |   |   | 3   |                                  |                   |              |          | \$4.50                 |
| TX    | 5   | Up to 5                                   | Up to 3                                   | B - 6 counties                   | 55%               | 50%          | 60.0     | \$5-\$7                |
| VA    | <sup>4</sup> (east) & <sup>3</sup> (west) | <sup>4</sup> (east) & <sup>3</sup> (west) | <sup>3</sup> (east) & <sup>2</sup> (west) | On 2 WMA's                       | 32                | 42           | 50       | \$4                    |
| WV    | 9   | Up to 8                                   | Up to 5                                   | 1 WMA                            | 22                | 18           | 58       | \$1-5                  |

\* North Carolina - Up to 2 bucks in those areas in the Western Season, Northwestern Season, and those areas of the Central Season where hunting with dogs is not allowed. Up to 4 bucks in those areas in the Eastern Season and those areas of the Central Season where hunting with dogs is allowed.



Table 1. Continued.

| State | No. of<br>Hunters <sup>5</sup> | 5-Year<br>Trend | Hunting License Fees<br>(Full Season) |                 | Tagging System                         |                                   |  |                                  |
|-------|--------------------------------|-----------------|---------------------------------------|-----------------|--|-----------------------------------|--|----------------------------------|
|       |                                |                 | Resident                              | Non-Resident    | Physical Tag?<br>License Tag?<br>None? | Validation                        |  | Bonus Tags<br>Available?         |
|       |                                |                 |                                       |                 |  | Mandatory?<br>Volunteer?<br>None? |  |                                  |
| AL    | 227,700                        | Stable          | \$16                                  | \$252           | None                                   | None                              |  | N/A                              |
| AR    | 250,000                        | Stable          | \$10.50 – 25                          | \$100 – 225     | License Tag                            | Mandatory                         |  | For Female Deer                  |
| FL    | 150,000                        | Stable          | \$12                                  | \$151           | None                                   | Some WMAs                         |  | No                               |
| GA    | 279,863                        | DOWN            | \$19                                  | \$177           | License Tag                            | NONE                              |  | WMA'S                            |
| KY    | 271,000*                       | Stable          | \$30.00                               | \$130           | Hunter Log                             | Mandatory                         |  | Yes                              |
| LA    | 169,200                        | Stable          | \$29-50                               | \$300-352       | None                                   | None                              |  | None                             |
| MD    | 84,086                         | Down            | \$36.50                               | \$180           | Physical Tag                           | Mandatory                         |  | Yes, antlered only               |
| MO    | 425,000                        | Stable          | \$15                                  | \$145           | License Tag                            | Mandatory                         |  | Yes, antlerless-only             |
| MS    | 174,000                        | Down            | \$18.85-<br>33.85                     | \$303.85-382.70 | None                                   | Volunteer-<br>Telchek             |  | Yes, antlerless,<br>DMAP & FeMAP |
| NC    | 195,000                        | Down            | \$30                                  | \$120           | License Tag                            | Mandatory                         |  | No                               |
| OK    | 180,708                        | Stable          | \$12.50                               | \$201           | Carcass Tag                            | Mandatory                         |  | No                               |
| SC    | 148,823                        | Stable          | \$25                                  | \$140-200       | None                                   | None                              |  | Yes                              |
| TN    | 227,000                        | Stable          | \$39                                  | \$156           | Physical                               | Mandatory                         |  | No                               |
| TX    | 544,993                        | Up              | \$23                                  | \$300           | License Tag                            | none                              |  | yes                              |
| VA    | 263,593                        | Down            | \$25-50                               | \$140-190       | Physical Tag                           | Mandatory                         |  | Yes, antlerless only             |
| WV    | 290,000*                       | Decrease        | \$25                                  | \$110           | Physical Tag                           | Mandatory                         |  | Yes                              |

## Hawkins, Susan

---

**From:** Gresham, Thomas  
**Sent:** Wednesday, February 04, 2004 8:18 AM  
**To:** Hawkins, Susan  
**Subject:** FW: HUNTING AND FISHING LICENSE

Susan,

Please pass Mr. Schiaffino's comments along to each of the commissioners.

Thanks,  
Thomas Gresham  
News and Media Relations Manager  
Public Information  
Louisiana Department of Wildlife and Fisheries

-----  
**From:** DON A SCHIAFFINO  
**Sent:** Tuesday, February 3, 2004 8:01 PM  
**To:** Gresham, Thomas  
**Subject:** Re: HUNTING AND FISHING LICENSE

MR. GRESHAM,I DON'T KNOW IF I WILL BE ABLE TO ATTEND ANY OF THE MEETINGS, BUT I WOULD REALLY APPRECIATE IF YOU WOULD PASS SOME OF MY CONCERNS ONTO SECRETARY LANDRENEAU. I HAVE BEEN HUNTING IN MISS. FOR ABOUT FIFTEEN YEARS EVEN ON LANDS THAT I ONCE OWNED. I HAVE SEEN THE PRICE OF NO RESIDANT LICENSE GO FROM \$60.00 TO \$300.00.DON'T GET ME WRONG I HUNT AND FISH IN LOUISIANA BUT, I'M THE TYPE OF PERSON THAT LIKES TO HUNT IN DIFFERENT PLACES.I HAVE HEARD OF PRICE WARS BETWEEN THE TWO STATES GOING ON FOR YEARS.MISSISSIPPI RESIDANTS WANT TO FISH LA. WATERS AND LA. RESIDENTS WANT TO HUNT MISS. LANDS.I DON'T KNOW IF THAT IS THE WHOLE STORY BUT, IT SEEMS THAT WE COULD REACH A HAPPY MEDIUM INSTEAD OF TRYING TO DETURE PEOPLE FROM COMING OVER BY MAKING LCENSE PRICES UNAFFORDABLE.I HAVE TWO SONS,TWELVE AND SIX, IT IS NO LONGER ABOUT ME IT IS ABOUT MY KIDS.I WANT TO BRING THEM UP IN THE OUTDOORS AND GIVE THE OPPURTUNITY TO HUNT AND FISH IN DIFFERENT PLACES.I DON'T KNOW IF ANYTHING CAN BE DONE BUT, JUST THOUGHT I WOULD BRING IT UP. THANKS IN ADVANCE DON SCHIAFFINO!

-----Original Message-----

From: Gresham, Thomas <Gresham\_TP@wlf.state.la.us>  
To: 'DON A SCHIAFFINO' <DONSCHIA@prodigy.net>  
Date: Wednesday, January 28, 2004 8:33 AM

# **ENFORCEMENT CASE REPORT**

**JANUARY, 2004**

**REGION 1 MINDEN**

**PARISHES BIENVILLE BOSSIER  
CADDO CLAIBORNE  
WEBSTER RED RIVER  
DESOTO**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>100</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>   |
| 15                 | Boating Safety   |
| 17                 | Angling W/O Resident License   |
| 3                  | Angling W/O License – Non Resident                                     |
| 1                  | Fish W/O Resident Pole License   |
| 1                  | Take Game Fish Illegally   |
| 1                  | Take Illegal Size Black Bass   |
| 1                  | Obtain License Or Engage Activity During Revocation                    |
| 1                  | Sell Fish W/O Wholesale/Retail Dealers License – Resident              |
| 1                  | Retail Dealer Buy Fish From Other Than Wholesale/Retail Seafood Dealer |
| 1                  | Failure To Maintain Records  |
| 5                  | Hunting W/O Resident License   |
| 2                  | Hunt From Moving Vehicle   |
| 1                  | Hunting W/Unplugged Gun  |
| 9                  | Hunt, Stand, Loiter On Public Road                                     |
| 3                  | Hunt MGB W/O State MGB License   |
| 1                  | Failure To Comply W/Hunter Safety Regulations                          |

|   |   |
|---|---|
| 1 | Hunt W/O Resident Big Game License                          |
| 3 | Hunt Or Take Deer Illegal Hours Or With Artificial Light    |
| 1 | Hunt Deer Illegal Methods                                   |
| 3 | Hunt Or Take Deer From Public Road                          |
| 2 | Hunt Or Take Illegal Deer Open Season                       |
| 1 | Failure To Wear Hunters Orange                              |
| 2 | Hunting Ducks W/O Federal Stamp                             |
| 2 | Hunting MGB Illegal Hours                                   |
| 1 | Violate MGB Tagging Requirements                            |
| 1 | Transport Of Completely Dressed MGB (No Wing Tip Left On)   |
| 3 | Violate Non Toxic Shot Requirements                         |
| 2 | Take/Possess Over Limit Ducks (Field Possession)            |
| 2 | Taking Or Possession Of Other Non Game Birds (No Season)    |
| 2 | Littering   |
| 1 | Other Than Wildlife & Fisheries                             |
| 1 | Possession Of Firearm By Convicted Felon – Certain Felonies |
| 6 | Operate ATV On Public Road                                  |
| 3 | Discharge Firearm From Public Road                          |

**WRITTEN WARNINGS:**

| <b>TOTAL</b> | <b>10</b> | <b>DESCRIPTION OF CITATION</b>                     |
|--------------|-----------|--|
| <b>2</b>     |           | <b>Boating Safety</b>                              |
| <b>2</b>     |           | <b>Angling W/O Resident License</b>                |
| <b>1</b>     |           | <b>Failure To Abide By Commission Rules</b>        |
| <b>1</b>     |           | <b>Failure To Wear Hunter Orange</b>               |
| <b>3</b>     |           | <b>Not Abiding By Rules And Regulations On WMA</b> |
| <b>1</b>     |           | <b>Hunting On WMA W/O WMA Permit</b>               |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>   |
|---|
| <b>3 Doe Deer; 1 Remington 870; 12 Ga. Shotgun; 1 Button Buck; 1 Charles Dailey, 12 Ga. Shotgun; 1 Remington 30/06 Rifle; 1 Cormorant; 41 Live 12 Ga. Shotgun Shells (Lead); 43 Spent 12 Ga. Shotgun Shells; 1 Black Bass (Released Alive); 5 Wood Ducks; 6 Turkey Lead Shot 10 Ga. Shells; 1 Remington .270 Cal. Rifle; 2 Spent .270 Cal. Shells; 4 Live 30/30 Cal. Shells; 5 Completely Dressed Ducks; 5 Wood Duck Heads; 4 Bags Whole Catfish; 1 Ruger 30/06 Rifle; 1 Deer Grunt Call; 5- 30/06 Shell Cartridges</b> |

**TOTAL OF EACH CATEGORY FOR REGION I:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>          |
|--------------|-----------------------------|
| <b>15</b>    | <b>Boating</b>              |
| <b>4</b>     | <b>Commercial Fishing</b>   |
| <b>13</b>    | <b>Federal Migratory</b>    |
| <b>2</b>     | <b>Littering</b>            |
| <b>11</b>    | <b>Miscellaneous</b>        |
| <b>23</b>    | <b>Recreational Fishing</b> |

|           |                               |
|-----------|-------------------------------|
| <b>32</b> | <b>State Hunting/Trapping</b> |
| <b>10</b> | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>0</b>     | <b>Public Assistance</b> |

**REGION 2: MONROE****PARISHES: E. CARROLL, JACKSON,  
LINCOLN, MOREHOUSE,  
OUACHITA, RICHALND,  
UNION, W. CARROLL**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>62</b>  |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                     |
| 8                  | Boating Safety                                     |
| 1                  | Hunt W/O A Resident License                        |
| 1                  | Hunt W/O A Big Game License                        |
| 1                  | Hunter's Orange Violation                          |
| 3                  | Hunt Migratory Game Bird (MGB) W/O A Federal Stamp |
| 1                  | Possess Wild Quadrupeds Without A License          |
| 1                  | Filing False Public Records                        |
| 5                  | Hunt With An Unplugged Gun                         |
| 1                  | Illegal Use of Emergency Blue Light                |
| 1                  | Not Abiding By Rules And Regulations On WMA        |
| 2                  | Hunt On DMAP W/O A Permit                          |
| 2                  | Take Non-Game Quadrupeds Illegally                 |
| 2                  | Hunt From A Moving Vehicle                         |
| 6                  | Hunt MGB Illegal Hours                             |
| 2                  | Possession Of Illegally Taken Deer Open Season     |
| 2                  | Hunt Deer From Public Road                         |



|   |  |
|---|--|
| 3 | Angle Without A License                    |
| 2 | Violate Non-toxic Shot Requirements        |
| 2 | Violate MGB Treaty Act                     |
| 4 | Hunt MGB W/O State MGB License             |
| 1 | Discharge Firearm From Public Road         |
| 4 | Illegal Possession Of Marijuana            |
| 1 | Contributing To The Delinquency Of A Minor |
| 2 | Violate Lake D'Arbonne Yo-yo Regulations   |
| 1 | Take Illegal Size Black Bass               |
| 2 | Take Over Limit Game Fish                  |
| 1 | Careless Operation Of Motor Vehicle        |

**WRITTEN WARNINGS:**

| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b>       |
|--------------|--------------------------------------|
| 1            | Expired Boat Regulations Certificate |
| 1            | Improper Boat Numbers                |
| 1            | Improper Running Lights              |
| 1            | No Boat Numbers                      |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>                                      |
|--|
| <b>1-Set DMAP Records; 2- Deer, 1-Doe, 2-Geese, 129- White Perch</b> |

**TOTAL OF EACH CATEGORY FOR REGION 2:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>8</b>     | <b>Boating</b>                |
| <b>-0-</b>   | <b>Commercial Fishing</b>     |
| <b>18</b>    | <b>Federal Migratory</b>      |
| <b>-0-</b>   | <b>Littering</b>              |
| <b>8</b>     | <b>Miscellaneous</b>          |
| <b>8</b>     | <b>Recreational Fishing</b>   |
| <b>20</b>    | <b>State Hunting/Trapping</b> |
| <b>4</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>  |
|--------------|---|
| <b>5</b>     | <b>Public Assistance (Assisting Stranded Motorists and Boaters)</b> |

**REGION 3: ALEXANDRIA****PARISHES: AVOYELLES, GRANT,  
NATCHITOCHES,  
RAPIDES, SABINE,  
VERNON, WINN**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>74</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                          |
| <b>3</b>           | <b>Failure To Wear Hunter's Orange</b>                  |
| <b>7</b>           | <b>Hunt Deer From Public Road</b>                       |
| <b>2</b>           | <b>Hunt Wild Quads Illegal Hours</b>                    |
| <b>7</b>           | <b>Hunt From Moving Vehicle</b>                         |
| <b>2</b>           | <b>Hunt Deer Illegal Methods</b>                        |
| <b>3</b>           | <b>Hunt W/O Resident License</b>                        |
| <b>4</b>           | <b>Federal Transport Completely Dressed MGB (Ducks)</b> |
| <b>2</b>           | <b>Federal – Hunt Ducks W/O Federal Stamp</b>           |
| <b>1</b>           | <b>Federal – Hunt MGB With Unplugged Gun</b>            |
| <b>2</b>           | <b>Federal – Hunt MGB Illegal Hours</b>                 |
| <b>5</b>           | <b>Hunt Deer Illegal Hours</b>                          |
| <b>3</b>           | <b>Illegal Spotlighting From A Public Road</b>          |
| <b>2</b>           | <b>Hunt, Stand, Loiter From Public Road</b>             |
| <b>1</b>           | <b>Hunt Without Resident Big Game License</b>           |
| <b>3</b>           | <b>Federal – Hunt MGB Illegal Hours</b>                 |
| <b>1</b>           | <b>Hunt With Unplugged Gun</b>                          |

|          |  |
|----------|--|
| <b>2</b> | <b>Federal – Violate Non-Toxic Shot Requirements</b> |
| <b>3</b> | <b>Federal – Transport Completely Dressed MGB</b>    |
| <b>1</b> | <b>Hunt on WMA W/O WMA Hunt Permit</b>               |
| <b>1</b> | <b>Careless Operation Of A Vehicle</b>               |
| <b>1</b> | <b>Loaded Gun In Vehicle</b>                         |
| <b>2</b> | <b>Expired Boat Registration</b>                     |
| <b>1</b> | <b>Failure to Comply With PFD Regulation</b>         |
| <b>4</b> | <b>Operating ATV On Public Road</b>                  |
| <b>1</b> | <b>Littering</b>                                     |
| <b>8</b> | <b>Angling W/O A License</b>                         |
| <b>2</b> | <b>Angling W/O a License Non Resident</b>            |

**WRITTEN WARNINGS:**

| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b>      |
|--------------|-------------------------------------|
| <b>1</b>     | <b>Hunting W/O Resident License</b> |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>           |
|---|
| <b>Ducks – 26; Rifles – 2; Lights – 1</b> |

**TOTAL OF EACH CATEGORY FOR REGION 3:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>3</b>     | <b>Boating</b>                |
| <b>0</b>     | <b>Commercial Fishing</b>     |
| <b>17</b>    | <b>Federal Migratory</b>      |
| <b>2</b>     | <b>Littering</b>              |
| <b>6</b>     | <b>Miscellaneous</b>          |
| <b>10</b>    | <b>Recreational Fishing</b>   |
| <b>36</b>    | <b>State Hunting/Trapping</b> |
| <b>1</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>0</b>     | <b>Public Assistance</b> |

**REGION 4: FERRIDAY****PARISHES: CALDWELL, CATAHOULA,  
CONCORDIA, FRANKLIN,  
LASALLE, MADISON, TENSAS**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>64</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                          |
| <b>11</b>          | <b>Boating Safety</b>                                   |
| <b>1</b>           | <b>Fail To Have Commercial License In Possession</b>    |
| <b>1</b>           | <b>Take Commercial Fish W/O Commercial Gear License</b> |
| <b>1</b>           | <b>Hunting W/O Resident License</b>                     |
| <b>8</b>           | <b>Hunting From Moving Vehicle</b>                      |
| <b>1</b>           | <b>Hunting W/Unplugged Gun</b>                          |
| <b>5</b>           | <b>Hunt Wild Quadrupeds Illegal Hours</b>               |
| <b>1</b>           | <b>Hunt Across Public Road</b>                          |
| <b>3</b>           | <b>Hunt From Public Road</b>                            |
| <b>1</b>           | <b>Hunt From Levee Road</b>                             |
| <b>1</b>           | <b>Hunt W/O Resident Big Game License</b>               |
| <b>3</b>           | <b>Running Deer Dogs During Still Hunting Season</b>    |
| <b>3</b>           | <b>Hunt Or Take Deer Illegal Hours</b>                  |
| <b>5</b>           | <b>Hunt Deer Illegal Methods</b>                        |
| <b>1</b>           | <b>Hunt Or Take Deer From Public Road</b>               |
| <b>1</b>           | <b>Hunt Or Take Illegal Deer Open Season</b>            |

|   |  |
|---|--|
| 1 | Possess Over Limit Of Deer                       |
| 3 | Possession Of Illegally Taken Deer (Open Season) |
| 3 | Fail To Comply W/Hunters Orange Regulations      |
| 1 | Hunting Ducks W/O Federal Stamp                  |
| 2 | Violating National Wildlife Regulations          |
| 1 | Not Abiding By Rules & Regulations On WMA        |
| 1 | Resisting An Officer                             |
| 2 | Littering  |
| 2 | Operate ATV On Public Road                       |
| 1 | Obtain License By Fraud                          |

**WRITTEN WARNINGS:**

| TOTAL | DESCRIPTION OF CITATION |
|-------|-------------------------|
| 0     |                         |

**CONFISCATIONS:**

| CONFISCATION DESCRIPTION     |
|------------------------------|
| 4 Deer; 8 Guns; 2 Spotlights |

**TOTAL OF EACH CATEGORY FOR REGION 4:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>11</b>    | <b>Boating</b>                |
| <b>2</b>     | <b>Commercial Fishing</b>     |
| <b>3</b>     | <b>Federal Migratory</b>      |
| <b>2</b>     | <b>Littering</b>              |
| <b>4</b>     | <b>Miscellaneous</b>          |
| <b>0</b>     | <b>Recreational Fishing</b>   |
| <b>42</b>    | <b>State Hunting/Trapping</b> |
| <b>0</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>8</b>     | <b>Public Assistance</b> |



**REGION 5: LAKE CHARLES****PARISHES: BEAUREGARD, CALCASIEU,  
EVANGELINE, ALLEN,  
CAMERON, ACADIA,  
VERMILION, JEFF DAVIS**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>105</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                                 |
| <b>12</b>          | <b>Boating</b>   |
| <b>6</b>           | <b>Angling W/O A License</b>                                   |
| <b>2</b>           | <b>Take Or Poss. Game Fish Illegally/White Perch/Hoop Nets</b> |
| <b>1</b>           | <b>Take Illegal Size Black Bass</b>                            |
| <b>1</b>           | <b>Fail To Have Comm. License In Possession</b>                |
| <b>1</b>           | <b>Sell And/Or Buy Fish W/O Retail Seafood License</b>         |
| <b>13</b>          | <b>Fail To Maintain Records</b>                                |
| <b>5</b>           | <b>Hntg. W/O A Res. Lic.</b>                                   |
| <b>13</b>          | <b>Hntg. From A Moving Vehicle And/Or Aircraft</b>             |
| <b>2</b>           | <b>Hntg. W/Unplugged Gun Or Silencer</b>                       |
| <b>11</b>          | <b>Hntg. Wild Quadrupeds And/Or Wild Birds Illegal Hours</b>   |
| <b>12</b>          | <b>Hunt, Stand, Loiter From Public Road</b>                    |
| <b>1</b>           | <b>Fail To Comply W/Hunter Safety Regulations</b>              |
| <b>2</b>           | <b>Hntg. W/O Res. Big Game License</b>                         |
| <b>2</b>           | <b>Hunt Or Take Deer Illegal Hours Or W/Artificial Light</b>   |

|   |  |
|---|--|
| 1 | Hntg. Deer Illegal Method                    |
| 1 | Hunt Or Take Deer Illegal Weapon             |
| 1 | Hntg. MGB W/O State MGB License              |
| 1 | Hntg. Ducks Or Geese W/O Federal Stamp       |
| 1 | Hntg. MGB W/Unplugged Gun                    |
| 2 | Hntg. MGB Illegal Hours                      |
| 2 | Violate MGB Tagging Requirements             |
| 1 | Violate Non Toxic Shot Regulations           |
| 1 | Hntg. Ducks Closed Season                    |
| 1 | Operate Vessel While Intoxicated             |
| 4 | Illegal Spotlighting From Public Road        |
| 3 | Other Than Wildlife And Fisheries Violations |
| 2 | Dicharge Firearm From Public Road            |

**WRITTEN WARNINGS:**

| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b> |
|--------------|--------------------------------|
| 1            | Angling W/O A License          |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>   |  |
|---|--|
| <b>2 Deer; 8 Rabbits; 3 Shotguns; 4 Rifles; 5 Q Beams; 1-Camo Pouch W/Bullets; 2 Boxes 22. Cal. Bullets; 1 Box Federal Ammo W/15 Loose Rounds; 5 Buckshot Shells; 17 Leadshot Shells; 1-5 Gallon Bucket W/Molasses &amp; Corn; 1 Plastic Garbage Bag W/Sweet Feed; 2 Teal; 19 Geese; 8 Ducks; 1 Pintail; 1 Ibis; 2 Woodcocks; 2 Hooded Mergansers; 1 Hoop Net; 4 White Perch RTW; 2 Black Bass; 2 Rods; 2 Reels; Trip Tickets</b> |  |

**TOTAL OF EACH CATEGORY FOR REGION 5:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>12</b>    | <b>Boating</b>                |
| <b>15</b>    | <b>Commercial Fishing</b>     |
| <b>9</b>     | <b>Federal Migratory</b>      |
|              | <b>Littering</b>              |
| <b>10</b>    | <b>Miscellaneous</b>          |
| <b>9</b>     | <b>Recreational Fishing</b>   |
| <b>50</b>    | <b>State Hunting/Trapping</b> |
| <b>1</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>2</b>     | <b>Public Assistance</b> |

**REGION 6: OPELOUSAS****PARISHES: IBERIA, IBERVILLE,  
PT.COUPÉE, LAFAYETTE,  
ST. LANDRY, ST. MARTIN,  
W.B.R.**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>118</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                               |
| <b>16</b>          | <b>Boating</b>   |
| <b>8</b>           | <b>Hunting W/O Resident License</b>                          |
| <b>7</b>           | <b>Angling W/O License In Possession</b>                     |
| <b>2</b>           | <b>Flight From An Officer</b>                                |
| <b>2</b>           | <b>Operate ATV Vehicle On Public Road</b>                    |
| <b>12</b>          | <b>Hunt Or Take Deer Illegal Hours With Artificial Light</b> |
| <b>16</b>          | <b>Hunt From Moving Vehicle</b>                              |
| <b>6</b>           | <b>Hunt From Public Road</b>                                 |
| <b>1</b>           | <b>Fish W/O Resident Pole License</b>                        |
| <b>2</b>           | <b>Failure To Abide By Commission Rules</b>                  |
| <b>2</b>           | <b>Fail To Wear Hunters Orange</b>                           |
| <b>2</b>           | <b>Hunt MGB W/O State MGB Stamp</b>                          |
| <b>7</b>           | <b>Hunt Wild Quadruped Illegal Hours</b>                     |
| <b>4</b>           | <b>Hunt From Levee Road</b>                                  |
| <b>1</b>           | <b>Violate Non-Toxic Shot Requirements</b>                   |
| <b>2</b>           | <b>Hunt Ducks Closed Season-Pintail</b>                      |

|   |   |
|---|---|
| 3 | Hunt MGB Illegal Hours  |
| 3 | Hunt Or Take Illegal Deer Open Season                         |
| 2 | Failure To Abide By Commission Rules                          |
| 4 | Hunt Or Take Deer From Public Road                            |
| 1 | Take/Sell Commercial Fish Bait Species W/O Commercial License |
| 1 | Take Commercial Fish W/O Commercial Gear License              |
| 1 | Field Possession On Untagged Deer                             |
| 1 | Fail To Maintain Sex Identification                           |
| 2 | Hunt On DMAP Lands W/O Permit From Owner/Lessee               |
| 2 | Take/Possess Over Limit Of Wood Ducks                         |
| 1 | Possess Over Limit Of Deer                                    |
| 1 | Hunt W/O Resident Big Game License                            |
| 2 | Hunt W/O Muzzleloader License                                 |
| 1 | Take Illegal Size Black Bass                                  |
| 1 | Not Abiding By Rules/Regulations On WMA                       |
| 2 | Illegal Possession Of Stolen Firearm                          |

**WRITTEN WARNINGS:**

|                 |                                |
|-----------------|--------------------------------|
| <b>TOTAL 19</b> | <b>DESCRIPTION OF CITATION</b> |
| 5               | Boating                        |

|          |  |
|----------|--|
| <b>9</b> | <b>Not Abiding By Rules/Regulations On WMA</b> |
| <b>3</b> | <b>Angling W/O License</b>                     |
| <b>1</b> | <b>Hunt W/O Resident License</b>               |
| <b>1</b> | <b>Failure To Wear Hunters Orange</b>          |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>  |
|--|
| <b>9 Deer, 9 Rifles, 3 Trucks, 1 Box of .22 Bullets, 1 Laser Sight, 1 Case, 1 Spotlight, 4 Rabbits, 1 Drake Pintail, 2 Shotguns, 3 Leadshot Shells, 2 Woodcock, 1 5 Pt. Horns, 7 Wood Ducks, 56 Catfish, 1 Ice Chest, 1 Black Bass</b> |

**TOTAL OF EACH CATEGORY FOR REGION 6:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>16</b>    | <b>Boating</b>                |
| <b>2</b>     | <b>Commercial Fishing</b>     |
| <b>8</b>     | <b>Federal Migratory</b>      |
| <b>0</b>     | <b>Littering</b>              |
| <b>7</b>     | <b>Miscellaneous</b>          |
| <b>9</b>     | <b>Recreational Fishing</b>   |
| <b>76</b>    | <b>State Hunting/Trapping</b> |
| <b>19</b>    | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| TOTAL | DESCRIPTION       |
|-------|-------------------|
| 0     | Public Assistance |

**REGION 7: BATON ROUGE****PARISHES: ASCENSION, E.B. ROUGE,  
E. FELICIANA, LIVINGSTON  
ST. HELENA, ST. TAMMANY,  
TANGIPAHOA, WASHINGTON,  
W. FELICIANA**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>142</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                       |
| 6                  | Boating  |
| 9                  | Angling Without Resident License                     |
| 1                  | Angling Without Non-Resident License                 |
| 1                  | Sell Fish Without Wholesale /Retail Dealer's License |
| 1                  | Buy/Sell Fish Without Retail Seafood Dealers License |
| 1                  | Possess/Sell Unlabeled Catfish                       |
| 8                  | Hunt Without Resident License                        |
| 4                  | Hunt Without Resident Big Game License               |
| 3                  | Hunt With Unplugged Gun                              |
| 15                 | Failure To Wear Hunters Orange                       |
| 8                  | Violate Rules and Regulations On W.M.A.'s            |
| 1                  | Hunt Without W.M.A. Permit                           |
| 3                  | Hunt Without Muzzleloader License                    |
| 1                  | Transport Without Required License                   |
| 17                 | Hunt From A Moving Vehicle                           |



|           |  |
|-----------|--|
| <b>9</b>  | <b>Hunt Deer From A Public Road</b>                          |
| <b>11</b> | <b>Hunt Deer Illegal Hours</b>                               |
| <b>4</b>  | <b>Take Deer Illegal Hours</b>                               |
| <b>4</b>  | <b>Take Deer Illegal Methods</b>                             |
| <b>1</b>  | <b>Hunt Deer Illegal Methods</b>                             |
| <b>1</b>  | <b>Attempt To Take Over Limit Of Deer</b>                    |
| <b>2</b>  | <b>Take Illegal Deer Open Season</b>                         |
| <b>1</b>  | <b>Hunt Wild Quadrupeds Illegal Hours</b>                    |
| <b>1</b>  | <b>Hunt Deer Closed Area</b>                                 |
| <b>2</b>  | <b>Possession Of Wild Quadrupeds (Deer) Without A Permit</b> |
| <b>2</b>  | <b>Hunt M.G.B Illegal Hours</b>                              |
| <b>1</b>  | <b>Take Over Limit of M.G. B. (Ducks)</b>                    |
| <b>3</b>  | <b>Violate Non-Toxic Shot Requirements</b>                   |
| <b>2</b>  | <b>Hunt M.G.B. (Ducks) With Unplugged Gun</b>                |
| <b>4</b>  | <b>Hunt M.G. B. (Ducks) Without Federal Stamp</b>            |
| <b>4</b>  | <b>Hunt M. G. B. (Ducks) Without State Stamp</b>             |
| <b>4</b>  | <b>Criminal Trespass</b>                                     |
| <b>2</b>  | <b>Unauthorized Use Of A Moveable</b>                        |
| <b>3</b>  | <b>Operate Without Scenic River Permit</b>                   |

|          |   |
|----------|---|
| <b>2</b> | <b>Violate Scenic River Rules and Regulations</b> |
|----------|---|

**WRITTEN WARNINGS:**

| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b> |
|--------------|--------------------------------|
| <b>6</b>     |                                |
| <b>1</b>     | <b>Boating</b>                 |
| <b>4</b>     | <b>No Hunters Orange</b>       |
| <b>1</b>     | <b>Angling Without License</b> |
|              |                                |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b> |                     |
|---------------------------------|---------------------|
| <b>11-Deer</b>                  | <b>13-Guns</b>      |
| <b>4-Ducks</b>                  | <b>2-Spotlights</b> |

**TOTAL OF EACH CATEGORY FOR REGION 7:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>6</b>     | <b>Boating</b>                |
| <b>4</b>     | <b>Commercial Fishing</b>     |
| <b>12</b>    | <b>Federal Migratory</b>      |
| <b>-0-</b>   | <b>Littering</b>              |
| <b>11</b>    | <b>Miscellaneous</b>          |
| <b>10</b>    | <b>Recreational Fishing</b>   |
| <b>99</b>    | <b>State Hunting/Trapping</b> |
| <b>6</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b><br><b>6</b> | <b>DESCRIPTION</b>   |
|--------------------------|--|
|                          | <b>Public Assistance</b><br><b>4-Assist Motorists</b><br><b>2-Lost Hunters</b> |

**REGION 8: NEW ORLEANS****PARISHES: PLAQUEMINE, ST. BERNARD,  
ORLEANS, JEFFERSON,  
ST. CHARLES**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>222</b>  |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>  |
| <b>51</b>          | <b>Boating</b>  |
| <b>20</b>          | <b>Angling W/O A License</b>  |
| <b>2</b>           | <b>Angling W/O A License Non-Resident</b>                             |
| <b>2</b>           | <b>Angling W/O A Saltwater License</b>                                |
| <b>2</b>           | <b>Take Or Poss. Undersized Red Drum(Recreational)</b>                |
| <b>3</b>           | <b>Take Or Poss. Undersized Black Drum</b>                            |
| <b>5</b>           | <b>Commission Rules And Regulations - Red Snapper</b>                 |
| <b>3</b>           | <b>Take/Poss. O/L Spotted Sea Trout(On Water)</b>                     |
| <b>3</b>           | <b>Commission Rules And Regulations - Grouper</b>                     |
| <b>2</b>           | <b>Commission Rules And Regulations - Cobia</b>                       |
| <b>1</b>           | <b>Commission Rules And Regulations - Amberjack</b>                   |
| <b>1</b>           | <b>Take Or Poss. Commercial Fish W/O Vessel License</b>               |
| <b>11</b>          | <b>Sell And/Or Buy Fish W/O Wholesale/Retail Dealer's License</b>     |
| <b>1</b>           | <b>Sell And/Or Buy Fish Without A Retail Seafood Dealer's License</b> |
| <b>9</b>           | <b>Fail To Maintain Records</b>                                       |
| <b>3</b>           | <b>Transport W/O Required License</b>                                 |

|           |  |
|-----------|--|
| <b>9</b>  | <b>Sell And/Or Purchase Game Fish</b>                        |
| <b>3</b>  | <b>Buy Spotted Sea Trout From A Unpermitted Fisherman</b>    |
| <b>11</b> | <b>Buy Commercial Fish From Unlicensed Fisherman</b>         |
| <b>11</b> | <b>Fail To Report Commercial Fisheries Data</b>              |
| <b>3</b>  | <b>Failure To Have Written Permission</b>                    |
| <b>3</b>  | <b>Unlawfully Take Oysters From State Water Bottoms</b>      |
| <b>3</b>  | <b>Take Oysters From Unapproved Area (Polluted)</b>          |
| <b>2</b>  | <b>Unlawfully Take Oysters Off A Private Lease</b>           |
| <b>1</b>  | <b>Possession Of Untagged/Improperly Tagged Oysters</b>      |
| <b>1</b>  | <b>Violate Sanitation Code</b>                               |
| <b>2</b>  | <b>Failure To Abide By Commission Rules</b>                  |
| <b>2</b>  | <b>Hunting From Moving Vehicle</b>                           |
| <b>2</b>  | <b>Hunt MGB W/O State Stamp</b>                              |
| <b>2</b>  | <b>Hunt Or Take Deer Closed Season</b>                       |
| <b>5</b>  | <b>Hunt Or Take Deer with Artificial Light</b>               |
| <b>5</b>  | <b>Take Deer From Public Road</b>                            |
| <b>2</b>  | <b>Take Illegal Deer Open Season</b>                         |
| <b>1</b>  | <b>Sell Reptiles Or Amphibian Without Collectors License</b> |
| <b>1</b>  | <b>Hunting Ducks W/O Federal Stamp</b>                       |
| <b>1</b>  | <b>Wanton Waste Of MGB</b>                                   |

|          |   |
|----------|---|
| <b>2</b> | <b>Using Lead Shot In Area Designated As Steel Shot Only</b>  |
| <b>3</b> | <b>Hunting Ducks Closed Season</b>                            |
| <b>4</b> | <b>Possess Over Limit Of Ducks</b>                            |
| <b>2</b> | <b>Hunting Gallinules Closed Season</b>                       |
| <b>1</b> | <b>Taking Ibis-No Season</b>                                  |
| <b>1</b> | <b>Taking Or Possession Of Other Non-Game Birds-No Season</b> |
| <b>3</b> | <b>Not Abiding By Rules And Regulations On WMA</b>            |
| <b>4</b> | <b>Criminal Trespass</b>                                      |
| <b>3</b> | <b>Littering</b>  |
| <b>1</b> | <b>Endangered Species Act</b>                                 |
| <b>1</b> | <b>Operating Vehicle While Intoxicated</b>                    |
| <b>7</b> | <b>State Interstate Commerce Violation</b>                    |
| <b>1</b> | <b>Possess For Sale Unlabeled Catfish</b>                     |

**WRITTEN WARNINGS:**

| <b>TOTAL 24</b> | <b>DESCRIPTION OF CITATION</b>             |
|-----------------|--|
| <b>2</b>        | <b>Boating</b>                             |
| <b>4</b>        | <b>Angling W/O A License</b>               |
| <b>1</b>        | <b>Angling W/O A Saltwater License</b>     |
| <b>4</b>        | <b>Take Or Poss. Undersized Red Drum</b>   |
| <b>2</b>        | <b>Take or Poss. Undersized Black Drum</b> |

|    |   |
|----|---|
| 1  | Failure to Display Proper Number on Vessel  |
| 10 | Not Abiding By Rules and Regulations on WMA |

**CONFISCATIONS:**

| CONFISCATION DESCRIPTION   |
|--|
| Donated....Hog(2)....Deer(1)....Ducks(43)....Speckled Trout(99)....Oyster Sacks(144)....Red Drum(6)....Black Drum(6)....Sea Gulls(2)....Ibis(2)....Crabs(100 Lbs.)....Red Snapper(20) Gallinule(2)....Hardware Confiscated....Rod And Reel(1)....Truck(1)....Shotguns(2)....Rifles(2) Ice Chest(1) |

**TOTAL OF EACH CATEGORY FOR REGION 8:**

| TOTAL | DESCRIPTION            |
|-------|------------------------|
| 51    | Boating                |
| 78    | Commercial Fishing     |
| 22    | Federal Migratory      |
| 3     | Littering              |
| 18    | Miscellaneous          |
| 29    | Recreational Fishing   |
| 21    | State Hunting/Trapping |
| 24    | Written Warnings       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| TOTAL | DESCRIPTION       |
|-------|-------------------|
| 1     | Public Assistance |

**REGION 9: SCHRIEVER**

**PARISHES: ASSUMPTION, ST. JAMES,  
ST. JOHN, ST. MARY,  
TERREBONNE, LAFOURCHE,  
JEFFERSON-GRAND ISLE,  
LOWER ST. MARTIN**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>162</b>  |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                        |
| <b>38</b>          | <b>Boating</b>  |
| <b>35</b>          | <b>Angling Without A License</b>                      |
| <b>3</b>           | <b>Angling Without A Non-Resident License</b>         |
| <b>1</b>           | <b>Violate Recreational Gear License Requirement</b>  |
| <b>17</b>          | <b>Angling Without Saltwater License</b>              |
| <b>2</b>           | <b>Angling Without Saltwater License Non-Resident</b> |
| <b>1</b>           | <b>Take Over Limit Of Red Drum On Water</b>           |
| <b>1</b>           | <b>Take Illegal Size Black Bass</b>                   |
| <b>7</b>           | <b>Take Undersized Red Drum Recreational</b>          |
| <b>1</b>           | <b>Take Undersized Spotted Sea Trout Recreational</b> |
| <b>7</b>           | <b>Take Undersized Black Drum Recreational</b>        |
| <b>3</b>           | <b>Take Over Limit Black Drum Recreational</b>        |
| <b>1</b>           | <b>Engage Activity During Revocation Of Licenses</b>  |
| <b>2</b>           | <b>Fail To Have Commercial License In Possession</b>  |



|          |  |
|----------|--|
| <b>1</b> | <b>Take Commercial Fish Without Commercial Gear License (Oyster Harvester)</b> |
| <b>1</b> | <b>Take Commercial Fish Without Commercial Vessel License</b>                  |
| <b>1</b> | <b>Sell And Buy Fish Without Resident Wholesale/Retail Dealer's License</b>    |
| <b>1</b> | <b>Fail To Maintain Records</b>  |
| <b>1</b> | <b>Violate Crab Trap Escape Ring Requirements</b>                              |
| <b>1</b> | <b>Take Oysters Without Oyster Harvester License (Captains Only)</b>           |
| <b>1</b> | <b>Failure To Have Written Permission</b>                                      |
| <b>3</b> | <b>Taking Oysters From Unapproved Area (Polluted)</b>                          |
| <b>1</b> | <b>Violate Sanitary Code</b>   |
| <b>7</b> | <b>Hunting Without Resident License</b>  |
| <b>3</b> | <b>Hunting From Moving Vehicle</b>   |
| <b>1</b> | <b>Hunting With Unplugged Gun</b>  |
| <b>4</b> | <b>Hunt Wild Quadrupeds Illegal Hours</b>                                      |
| <b>4</b> | <b>Hunt From Levee Road</b>  |
| <b>1</b> | <b>Possession Of Buckshot During Closed Deer Season</b>                        |
| <b>2</b> | <b>Hunt Without Resident Big Game License</b>                                  |
| <b>3</b> | <b>Fail To Wear Hunters Orange</b>   |
| <b>1</b> | <b>Hunt On DMAP Lands Without Permit From Owner</b>                            |
| <b>1</b> | <b>Hunt Ducks Without Federal Stamp</b>  |

|   |  |
|---|--|
| 1 | Hunt MGB Illegal Hours   |
| 1 | Using Lead Shot In Area Designated As Steel Shot Only  |
| 2 | Not Abiding By WMA Rules And Regulations By Having Loaded Firearm In Moving Boat                         |
| 1 | Not Abiding By WMA Rules And Regulations By Hunting Deer With Modern Firearm During Muzzle Loader Season |

**WRITTEN WARNINGS:**

| <b>TOTAL 24</b> | <b>DESCRIPTION OF CITATION</b>                 |
|-----------------|--|
| 2               | Boating  |
| 8               | Angling Without A License                      |
| 2               | Angling Without A Non-Resident License         |
| 7               | Angling Without Saltwater License              |
| 3               | Angling Without Non-Resident Saltwater License |
| 1               | Hunt MGB Without State Stamp                   |
| 1               | Fail To Wear Hunter Orange                     |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>  |
|--|
| 3 Flounders, 19 Lbs. Shrimp, 6 Rabbits, 65 Black Drum, 23 Red Drum, 1 Black Bass, 2 Deer, 13 Sacks Oysters, 18 D-Map Tags, 2 Shotguns, 1 Pistol, 3 Rods And Reels, 1 Wire Trap, 2 Spot Lights, 4 Recreational Licenses, 2 Boats (Paper Seizures), 3 Oyster Dredges, Various Shotgun Shells |

**TOTAL OF EACH CATEGORY FOR REGION 9:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>38</b>    | <b>Boating</b>                |
| <b>13</b>    | <b>Commercial Fishing</b>     |
| <b>3</b>     | <b>Federal Migratory</b>      |
| <b>0</b>     | <b>Littering</b>              |
| <b>0</b>     | <b>Miscellaneous</b>          |
| <b>79</b>    | <b>Recreational Fishing</b>   |
| <b>29</b>    | <b>State Hunting/Trapping</b> |
| <b>24</b>    | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>4</b>     | <b>Public Assistance</b> |

**OYSTER STRIKE FORCE****COASTAL WATERS**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>34</b>  |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                               |
| 1                  | Take Or Possess Commercial Fish Without A Commercial License |
| 1                  | Take Or Possess Oysters Without An Oyster Harvester License  |
| 2                  | Failure To Have Written Permission                           |
| 1                  | Unlawfully Take Oysters From State Water Bottoms             |
| 2                  | Take Oysters From An Unapproved Area                         |
| 2                  | Unlawfully Take Oysters From Private Lease                   |
| 2                  | Take Undersized Oysters From Natural Reef                    |
| 2                  | Take Oysters Closed Season                                   |
| 1                  | Failure To Display Proper Number On Vessel                   |
| 3                  | Violate Sanitary Code  |
| 3                  | Take Or Possess Over Limit Black Drum                        |
| 3                  | Take Or Possess Undersize Red Drum                           |
| 3                  | Take Or Possess Undersize Black Drum                         |
| 2                  | Angling Without A Saltwater License Non Resident             |
| 2                  | Angling Without A Basic License Non Resident                 |
| 1                  | No Boat Registration In Possession                           |
| 1                  | Fail To Display Valid Certificate Decal                      |

|          |  |
|----------|--|
| <b>1</b> | <b>Failure To Comply With PFD Requirements</b> |
| <b>1</b> | <b>Obstruction Of Justice</b>                  |

**WRITTEN WARNINGS:**

| <b>TOTAL 3</b> | <b>DESCRIPTION OF CITATION</b>                          |
|----------------|---|
| <b>1</b>       | <b>Failure To Display Proper Number On Vessel</b>       |
| <b>1</b>       | <b>Angling Without A Basic License Non Resident</b>     |
| <b>1</b>       | <b>Angling Without A Saltwater License Non Resident</b> |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>                        |
|--|
| <b>135 Sacks Of Oysters, 9 Red Drum, 44 Black Drum</b> |

**TOTAL OF EACH CATEGORY FOR OSF:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>          |
|--------------|-----------------------------|
| <b>3</b>     | <b>Boating</b>              |
| <b>17</b>    | <b>Commercial Fishing</b>   |
| <b>0</b>     | <b>Federal Migratory</b>    |
| <b>0</b>     | <b>Littering</b>            |
| <b>1</b>     | <b>Miscellaneous</b>        |
| <b>13</b>    | <b>Recreational Fishing</b> |

|          |                               |
|----------|-------------------------------|
| <b>0</b> | <b>State Hunting/Trapping</b> |
| <b>3</b> | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

|              |                          |
|--------------|--------------------------|
| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
| <b>0</b>     | <b>Public Assistance</b> |

**SPECIAL INVESTIGATIVE UNIT****STATEWIDE**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>19</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>                            |
| <b>1</b>           | <b>Sell Bass As Catfish</b>                               |
| <b>5</b>           | <b>Sell Fish Without Retail Seafood Dealer's License</b>  |
| <b>1</b>           | <b>Commercial Fisherman Sell To Consumer Without</b>      |
| <b>2</b>           | <b>Fail To Maintain Records</b>                           |
| <b>1</b>           | <b>Transport Without Required License.</b>                |
| <b>1</b>           | <b>Violate Sanitary Code (Oysters)</b>                    |
| <b>1</b>           | <b>Buy Fish Without Wholesale/Retail Dealer's License</b> |
| <b>1</b>           | <b>Possess Less Than 10% Untagged Oysters</b>             |
| <b>1</b>           | <b>Possess Over The Limit Ducks</b>                       |
| <b>1</b>           | <b>Hunt Ducks Without Federal Stamp</b>                   |
| <b>1</b>           | <b>Hunt Without Resident License</b>                      |
| <b>1</b>           | <b>Hunt Migratory Birds Without State MGB License</b>     |
| <b>1</b>           | <b>Angling Without a License</b>                          |
| <b>1</b>           | <b>Angling Without Saltwater License</b>                  |

**WRITTEN WARNINGS:**

|              |                                |
|--------------|--------------------------------|
| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b> |
| <b>0</b>     |                                |

**CONFISCATIONS:**

| CONFISCATION DESCRIPTION   |
|--|
| 75 Pounds Catfish (Donated); 135 Pounds Dressed Catfish(Donated); 30 Pounds Bass (Destroyed) |

**TOTAL OF EACH CATEGORY FOR SIU:**

| TOTAL | DESCRIPTION            |
|-------|------------------------|
| 0     | Boating                |
| 13    | Commercial Fishing     |
| 2     | Federal Migratory      |
| 0     | Littering              |
| 0     | Miscellaneous          |
| 2     | Recreational Fishing   |
| 2     | State Hunting/Trapping |
| 0     | Written Warnings       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| TOTAL | DESCRIPTION       |
|-------|-------------------|
| 0     | Public Assistance |



**S.W.E.P.****COASTAL WATERS**

|                    |   |
|--------------------|---|
| <b>TOTAL CASES</b> | <b>26</b>   |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>  |
| <b>3</b>           | <b>Boating</b>  |
| <b>5</b>           | <b>Possess Red Snapper Closed Season – Commercial Rules &amp; Regulations</b> |
| <b>1</b>           | <b>Angling W/O License</b>  |
| <b>1</b>           | <b>Angling W/O Saltwater License</b>  |
| <b>2</b>           | <b>Trawl State Waters Closed Season (Outside Waters)</b>                      |
| <b>2</b>           | <b>Take/Possess Undersize White Shrimp</b>                                    |
| <b>2</b>           | <b>Violate Non-Toxic Shot Requirements</b>                                    |
| <b>2</b>           | <b>Hunting MGB With Unplugged Gun</b>   |
| <b>2</b>           | <b>Take Undersize Oysters From Natural Reef</b>                               |
| <b>2</b>           | <b>Fail To Have Written Permission (Oysters)</b>                              |
| <b>2</b>           | <b>Unlawfully Take Oysters Off Private Lease</b>                              |
| <b>1</b>           | <b>Harvest Oysters W/O Oyster Harvester License</b>                           |
| <b>1</b>           | <b>Take Commercial Fish W/O Commercial License</b>                            |

**WRITTEN WARNINGS:**

|              |                                |
|--------------|--------------------------------|
| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b> |
| <b>0</b>     |                                |

**CONFISCATIONS:**

| <b>CONFISCATION DESCRIPTION</b>   |  |
|---|--|
| <b>20-Red Snapper; 1-Red Drum; 2-Black Drum; 2,840 Lbs. Shrimp Sold @ \$1,278.00;<br/>50 Sacks Of Oysters; 4-Trawls; 2-Oyster Dredges</b> |  |

**TOTAL OF EACH CATEGORY FOR SWEP:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>            |
|--------------|-------------------------------|
| <b>3</b>     | <b>Boating</b>                |
| <b>17</b>    | <b>Commercial Fishing</b>     |
| <b>2</b>     | <b>Federal Migratory</b>      |
| <b>0</b>     | <b>Littering</b>              |
| <b>0</b>     | <b>Miscellaneous</b>          |
| <b>2</b>     | <b>Recreational Fishing</b>   |
| <b>2</b>     | <b>State Hunting/Trapping</b> |
| <b>0</b>     | <b>Written Warnings</b>       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| <b>TOTAL</b> | <b>DESCRIPTION</b>       |
|--------------|--------------------------|
| <b>0</b>     | <b>Public Assistance</b> |

**Note:****Boats Checked: 72****Hours Ran: 73**

**REFUGE PATROL****MARSH ISLAND, ROCKEFELLER,  
STATE WILDLIFE**

|                    |  |
|--------------------|--|
| <b>TOTAL CASES</b> | <b>35</b>  |
| <b>TOTAL</b>       | <b>DESCRIPTION OF CITATION</b>   |
| <b>4</b>           | <b>Boating</b>   |
| <b>3</b>           | <b>Take Or Sell Commercial Fish W/O A Commercial Fisherman's License</b> |
| <b>3</b>           | <b>Take Or Possess Commercial Fish W/O A Gear License</b>                |
| <b>3</b>           | <b>Take Or Possess Commercial Fish W/O A Vessel License</b>              |
| <b>6</b>           | <b>Take Or Possess Undersize White Shrimp</b>                            |
| <b>3</b>           | <b>Trawl State Waters Closed Season (Outside Waters)</b>                 |
| <b>1</b>           | <b>Fail To Maintain Records</b>  |
| <b>2</b>           | <b>Violate Non-Toxic Shot Requirements</b>                               |
| <b>4</b>           | <b>Hunt Ducks Closed Season</b>  |
| <b>2</b>           | <b>Hunt Ducks Or Geese W/O Federal Stamp</b>                             |
| <b>1</b>           | <b>Hunt M.G.B. W/O State Migratory Stamp</b>                             |
| <b>1</b>           | <b>Hunt M.G.B. W/O State Hunting License</b>                             |
| <b>1</b>           | <b>Allow Unlicensed Fisherman To Use Vessel</b>                          |
| <b>1</b>           | <b>Allow Unlicensed Fisherman To Use Commercial Gear</b>                 |

**WRITTEN WARNINGS:**

|              |                                |
|--------------|--------------------------------|
| <b>TOTAL</b> | <b>DESCRIPTION OF CITATION</b> |
| <b>0</b>     |                                |

**CONFISCATIONS:**

| CONFISCATION DESCRIPTION  |  |
|---|--|
| 6-Lead Shot Shells; 5,147 Lbs. White Shrimp; 8-Shrimp Trawls; 1-Duck; 1-Skipjack Tuna |  |

**TOTAL OF EACH CATEGORY FOR REFUGE PATROL:**

| TOTAL | DESCRIPTION            |
|-------|------------------------|
| 4     | Boating                |
| 21    | Commercial Fishing     |
| 10    | Federal Migratory      |
| 0     | Littering              |
| 0     | Miscellaneous          |
| 0     | Recreational Fishing   |
| 0     | State Hunting/Trapping |
| 0     | Written Warnings       |

**TOTAL NUMBER FOR PUBLIC ASSISTANCE:**

| TOTAL | DESCRIPTION                                |
|-------|--|
| 7     | Public Assistance – Towed Stranded Vessels |

**TOTAL CASES:** 1,049

**WRITTEN WARNINGS:** 89

**PUBLIC ASSISTANCE:** 26

**ENFORCEMENT AVIATION REPORT**  
**JANUARY 2004**

**185 – Amph. – 61092**  
**Hrs. - 27.1**

**185 – Amph. – 9667Q**  
**Hrs. – 44.9**

**210 – 9467Y**  
**Hrs. - 23.2**

**Enforcement Hours -       70.7**

**Other Division -           24.5**

**Total Plane Use -         95.2**

**LaCaze, B "Keith"**

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**From:** DeGraff, Jeffrey  
**Sent:** Tuesday, January 27, 2004 4:42 PM  
**To:** Burke, Marianne  
**Subject:** LDWF Region 2 News (January 27, 2004)

## **NEWS FROM THE LA. DEPT. OF WILDLIFE & FISHERIES**

The Public Information Section of the Louisiana Department of Wildlife and Fisheries is responsible for the distribution of LDWF news releases and the department's biweekly newsletter.

If you have questions, please contact one of the following Public Information Section staff members:

**Thomas Gresham**  
Media Relations Manager  
(gresham\_tp@wlf.state.la.us)

**Jeffrey DeGraff**  
Public Information Officer  
(degraff\_ja@wlf.state.la.us)

2004-019

### **WEST CARROLL MEN CITED FOR NIGHT HUNTING IN MADISON PARISH**

Two West Carroll Parish residents, Allen Johnston, 35, and Lonnie Green, 33 both of Pioneer were cited on December 19 by Louisiana Department of Wildlife and Fisheries Enforcement Agents. The two were cited for allegedly hunting deer during illegal hours, hunting from a moving vehicle and hunting from a public road.

LDWF Enforcement Agent Wayne Parker saw the men allegedly shining a spotlight from the window, as their vehicle traveled along Hwy. 80. The men were found to be in possession of a loaded .22-magnum rifle. The spotlight and rifle were seized in connection with the case.

The penalty for hunting deer during illegal hours is a fine of up to \$950, jail for not more than 120 days, or both, plus court costs and forfeiture of seized items.

Hunting from a moving vehicle carries a fine of up to \$500, jail for not more than 90 days, or both, plus court costs. The penalty for hunting deer from a public road is a fine of up to \$350, jail for not more than 60 days, or both, plus court costs.

Agents participating in the case were Senior Agents Wayne Parker and Scott Watson, and Sgt. Cecil Wells.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469 (lacaze\_bk@wlf.state.la.us).**

**LaCaze, B "Keith"**

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**From:** DeGraff, Jeffrey  
**Sent:** Tuesday, January 27, 2004 4:44 PM  
**To:** Burke, Marianne  
**Subject:** LDWF Region 4 News (January 27, 2004)

## **NEWS FROM THE LA. DEPT. OF WILDLIFE & FISHERIES**

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Media Relations Manager  
(gresham\_tp@wlf.state.la.us)

**Jeffrey DeGraff**  
Public Information Officer  
(degraff\_ja@wlf.state.la.us)

2004-020

### **COLUMBIA MAN CITED FOR W.M.A. VIOLATIONS IN CALDWELL PARISH**

Charles R. (Rod) Shipp, 44, of Columbia was cited on December 12 for alleged violations of wildlife management area regulations on Boeuf River WMA.

Louisiana Department of Wildlife and Fisheries Enforcement Agent David Henslee found an ATV and empty bow case on a closed road on Boeuf Wildlife Management Area. Approximately 250 yards from the ATV, Agent Henslee found Shipp bowhunting from a stand. It was determined that Henslee had been left on the WMA overnight, in violation of the regulations. Corn was distributed on the ground near the stand, a violation of baiting prohibitions on WMA lands.

Shipp was cited for the three violations of WMA rules and regulations. The penalty for each count of not abiding by rules and regulations on a WMA is a fine of up to \$350, jail for up to 60 days, or both, plus court costs.

**EDITORS:** *For more information, contact Maj. Keith LaCaze at 225/765-2469 (lacaze\_bk@wlf.state.la.us).*

2004-021

### **WILDLIFE AGENT AND CALDWELL PARISH RESIDENTS RESCUE VICTIMS OF OVERTURNED BOAT**

On the night of January 3, Louisiana Department of Wildlife and Fisheries Enforcement Senior Agent Scott Watson and two Columbia residents identified as Darrell Howard, 31, and Thomas Thorn Howard, 15, rescued six victims from a capsized boat in Lafourche Lake. Lafourche Lake is located in Caldwell Parish.



While patrolling near Lafourche Lake at approximately 11:15 p.m., Agent Watson saw the two Howard men running across the road and towards the lakeshore. They told Agent Watson that a boat had flipped over in the lake. Agent Watson and the men then used a small boat to make their way to the victims. Upon reaching the victims, Agent Watson entered the water to get a P.F.D. (lifejacket) into the hands of a 14-year-old child in the water. None of the six victims were wearing PFD's. The Howards then used their small boat to get the victims to shore. The first victim placed in the boat was a 21-year-old expectant mother.

After further investigation and interviewing, the operator of the capsized boat, Travis McFarlain Jr., 36, of Pine Prairie was issued citations for failure to comply with P.F.D requirements, no running lights, and overloaded boat. Each of these offenses carries a civil fine of \$50. McFarlain was also issued a citation for alleged reckless operation of a watercraft. Reckless operation of a boat is punishable by a fine of up to \$500, jail for 90 days, or both, plus court costs.

Additional agents participating in the investigation were Sgt. Cecil Wells and Senior Agent David Henslee.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469 (lacaze\_bk@wlf.state.la.us).**

**-30-**

## **LaCaze, B "Keith"**

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**From:** DeGraff, Jeffrey  
**Sent:** Tuesday, January 27, 2004 4:43 PM  
**To:** Burke, Marianne  
**Subject:** LDWF Region 6 News (January 27, 2004)

### **NEWS FROM THE LA. DEPT. OF WILDLIFE & FISHERIES**

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**Jeffrey DeGraff**  
Public Information Officer  
(degraff\_ja@wlf.state.la.us)

2004-022

### **TWO ACADIA MEN SENTENCED FOR IBERIA PARISH FISHERIES VIOLATIONS**

Edward A. Perkins Jr., 23, of Church Point, entered a plea of guilty on January 21, in the 16th Judicial District Court in Iberia Parish for theft of articles less than \$300 in value. He received a six month suspended jail sentence and was placed on supervised probation for one year. In addition he was ordered to pay a fine and court costs totaling \$359 and restitution to the victim in the amount of \$150. Perkins was also forbidden by the court to sell shrimp or seafood products in any manner for one year. The costs associated with Perkins' sentence were ordered to be paid within 90 days or he is to serve six months in jail.

Donald Wayne Thibodeaux, 46, also of Church Point entered a plea of guilty on January 22, in the 16th Judicial District Court in Iberia Parish for buying and or selling fish without a retail seafood dealer's license. He received a three month suspended jail sentence and was placed on supervised probation for two years. In addition he was ordered to pay a fine and court costs totaling \$762 and restitution to the victim in the amount of \$250. Thibodeaux was also forbidden by the court to sell shrimp or seafood products for one year. The costs associated with Thibodeaux's sentence were ordered to be paid within 60 days or serve 90 days in jail.

These sentences stemmed from an investigation by Louisiana Department of Wildlife and Fisheries Enforcement Division agents and the Iberia Parish Sheriff's Department. In June of 2003, Perkins and Thibodeaux sold shrimp to a New Iberia woman in Coteau. The victim paid \$350 for 100 pounds of head on shrimp and ended up with approximately 31 pounds of tails after the shrimp were deheaded. The average weight of shrimp after 100 pounds were deheaded would be 65 pounds. Neither Perkins nor Thibodeaux had a retail seafood dealer's license to sell shrimp.

Sixteenth Judicial Court Judge Gerard Wattigny presided over the cases and Assistant District Attorney Ralph K. Lee prosecuted. Agents participating in the investigation were Lt. Glenn Angelle,

Sgt. Robert Buatt, Senior Agents Kirby Henry and Aaron Monceaux and Ibèria Parish Sheriff's Detective Scott Hotard.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469 (lacaze\_bk@wlf.state.la.us).**

2004-023

## **NIGHT HUNTERS ARRESTED**

Louisiana Department of Wildlife and Fisheries Enforcement Division agents arrested four men on January 5 for alleged night hunting violations and vandalism. The four men were cited for hunting deer during illegal hours with artificial light, hunting from a moving vehicle and hunting from a public road.

Arrested were Landen K. Esneault, 19, and Beau D. Behrnes, 18, both of Port Allen, Jeremie Lefeaux, 17, of Maringouin and Mare G. Melancon Jr., 17, of Bueche. The four men were booked into the West Baton Rouge Parish Jail for the violations after agents apprehended them for allegedly shooting at a deer on Rosedale Road in West Baton Rouge Parish. A .22-caliber rifle was seized in connection with the case.

All four men were also connected to a drive-by shooting of Port Allen High School, which caused considerable damage to the school. The shooting occurred just prior to the subjects being apprehended by the enforcement agents. Additional charges are pending.

The penalty for hunting deer during illegal hours with artificial light is a fine of up to \$950, jail for not more than 120 days, or both, plus court costs and forfeiture of anything seized.

The violations of hunting from a public road and hunting from a moving vehicle each carry a fine of up to \$500, jail for not more than 90 days, or both, plus court costs.

Agents participating in the case were Sgt. Donald Vallet and Sr. Agents Cliff Ortis and Channing Duvall.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469 (lacaze\_bk@wlf.state.la.us).**

**-30-**

## **LaCaze, B "Keith"**

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**From:** DeGraff, Jeffrey  
**Sent:** Tuesday, January 27, 2004 4:43 PM  
**To:** Burke, Marianne  
**Subject:** LDWF Region 8 News (January 27, 2004)

### **NEWS FROM THE LA. DEPT. OF WILDLIFE & FISHERIES**

The Public Information Section of the Louisiana Department of Wildlife and Fisheries is responsible for the distribution of LDWF news releases and the department's biweekly newsletter.

If you have questions, please contact one of the following Public Information Section staff members:

**Thomas Gresham**  
Media Relations Manager  
(gresham\_tp@wlf.state.la.us)

**Jeffrey DeGraff**  
Public Information Officer  
(degraff\_ja@wlf.state.la.us)

2004-024

### **GILL NETTERS CAUGHT IN YELLOW COTTON BAY**

Louisiana Department of Wildlife and Fisheries enforcement agents have arrested and cited two men for allegedly taking spotted sea trout with a gill net during closed season.

Clayton M. Buras, 21, of Venice, and Dean J. Ancalade, 21, also of Buras were arrested on January 22 and booked into the Plaquemines Parish Prison for using a saltwater gill net illegally and taking commercial spotted seatrout during close season. In addition, Buras was charged with flight from an officer. The case resulted from a night patrol in the Yellow Cotton Bay area of Plaquemines Parish.

After finding a suspicious vehicle parked at the Yellow Cotton Bay Marina the agents investigated further and set up surveillance in the bay. They spotted Buras and Ancalade and watched as they worked gill nets taking fish in the darkness. All fish were loaded into sacks and hidden in the weeds along the shoreline. The fishermen were then apprehended and placed under arrest. A total of 464 spotted seatrout were seized as a result of the incident.

Violations of using saltwater gill nets illegally and taking spotted sea trout in closed season are both punishable by fines up to \$950, jail for not more than 120 days, or both, license and permit revocation and forfeiture of anything seized in connection with the violation. Buras and Ancalade will also face civil monetary fines for the 464 spotted sea trout illegally taken. The charges will be forwarded to the district attorney's office in Plaquemines Parish for prosecution.

Agents participating in the case were Lt. Robert Martin, Senior Agent Mike Garrity, Agents Jason Gernados, Roy Pier, Adam Young and Villere Reggio.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469  
(lacaze\_bk@wlf.state.la.us).**

2004-025

## **JEFFERSON PARISH RESIDENT ARRESTED FOR DWI**

Agents from the Louisiana Department of Wildlife and Fisheries Enforcement Division have arrested Lethan R. Gill, 35, of Marrero for allegedly driving a motorboat while intoxicated. He was booked into the Jefferson Parish Correctional Center on December 31.

Enforcement agents were on boating safety patrol on the Bayou Segnette Waterway in Jefferson Parish when they stopped Gill's vessel to perform a boating safety compliance check. During the safety check, the agents noticed that Gill appeared to be intoxicated. Agents administered several standardized field sobriety tests and determined suspected intoxication. Gill was arrested and cited for operating a vessel while intoxicated.

The penalty for a first offense DWI violation is a fine of not more than \$1000 and imprisonment for not more than six months.

Agents participating in the case were Senior Agent Eddie Skena and Sgt. James Gregoire.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469 ([lacaze\\_bk@wlf.state.la.us](mailto:lacaze_bk@wlf.state.la.us)).**

2004-026

## **MIGRATORY GAME BIRD HUNTER CAUGHT OVER BAIT**

Louisiana Department of Wildlife and Fisheries Enforcement Division enforcement agents and U.S. Fish and Wildlife Service agents issued federal citations to a duck hunter for allegedly hunting migratory game birds with the aid of bait.

Troy L. Caron, 30, of Chalmette, was cited for alleged violations of the Migratory Bird Treaty Act including hunting migratory game birds over bait, placing bait for the purpose of taking migratory game birds, taking over the limit of snipe, and wanton waste of migratory game birds. The case was a result of a week-long surveillance by state and federal agents after USFWS agents found and documented a baited pond as they were conducting an aerial flight in the Hopedale area of St. Bernard Parish.

On the morning of January 17, agents watched Caron shoot and kill 11 snipe and three ducks over the baited area. The legal limit on snipe is eight per person. At the conclusion of his hunt, the agents made contact with Caron and learned that he had placed 80 pounds of corn in the pond on January 10. All snipe and ducks were seized in connection with the case.

Violations of the Migratory Bird Treaty Act are punishable by fines up to \$5,000, jail for up to six months, or both. The citations will be forwarded to the office of the U.S. Attorney in New Orleans for prosecution.

Agents participating in the case were Senior Agents Mike Garrity and Roy Pier and USFWS Agent Stephen Clark.

**EDITORS: For more information, contact Maj. Keith LaCaze at 225/765-2469**

## RESOLUTION

### MODIFICATION OF SHARK HARVEST RULES

adopted by the  
Louisiana Wildlife and Fisheries Commission  
February 5, 2004

WHEREAS, regulations promulgated by the Louisiana Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, have provided rules for the harvesting of sharks in Louisiana's state waters, and

WHEREAS, NMFS has adopted management measures for sharks harvested in the EEZ off of Louisiana, and

WHEREAS, adoption of compatible regulations for Louisiana state waters where feasible would enhance effectiveness and enforceability of the regulations already in place for sharks harvested in the EEZ off of Louisiana, and

WHEREAS, substantial fisheries for sharks do also occur in Louisiana state waters that are significant to the citizens of the State of Louisiana and thus enactment of compatible regulations may also impact those persons involved in those fisheries, and

WHEREAS, R.S. 56:6(10), 56:326(E)(2), 56:326.1, and 56:326.3 provide authority for adoption of this rule through the Wildlife and Fisheries Commission, and

WHEREAS, R.S. 56:325.2(A) provides that all sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore,

THEREFORE BE IT RESOLVED, that the Wildlife and Fisheries Commission hereby promulgates a Notice of Intent to modify existing regulations to incorporate federal law and regulation changes for sharks as part of the state regulations, clarifies the existing rule, and

BE IT FURTHER RESOLVED, the complete copy of the Notice of Intent and proposed rule are attached to and made part of this resolution, and

BE IT FURTHER RESOLVED, that this Rule shall become effective upon promulgation, and

BE IT FURTHER RESOLVED, that the Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

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Bill A. Busbice, Jr., Chairman  
Wildlife and Fisheries  
Commission

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Dwight Landreneau, Secretary  
Department of Wildlife and  
Fisheries

## NOTICE OF INTENT

Department of Wildlife and Fisheries  
Wildlife and Fisheries Commission

### Sharks and Sawfishes

The Wildlife and Fisheries Commission does hereby give notice of its intent to amend a Rule, LAC 76:VII.357, modifying the existing rule. Authority for adoption of this Rule is included in R.S. 56:6(10), 56:320.2(C), 56:325.2 (A), 56:326.1, 56:326.3, and 56:326(E)(2). Said Rule is attached to and made a part of this Notice of Intent.

## Title 76

### WILDLIFE AND FISHERIES

#### Part VII. Fish and Other Aquatic Life

#### Chapter 3. Saltwater Sport and Commercial Fishery

#### §357. Sharks and Sawfishes - Harvest Regulations

A. The following rules and regulations are established for the taking and possession of sharks (including sawfishes) (Class Elasmobranchiomorphi: Orders Hexanchiformes, Lamniformes, Squaliformes, and Rajiformes) from within or without Louisiana waters. The provisions of this Section shall not apply to shrimp or menhaden harvest, and nothing contained herein is intended or shall be construed to repeal, amend, or otherwise modify the provisions of law applicable to shrimp or menhaden fishing, except for provisions:

1. outlawing finning of shark;



2. requiring a Commercial State Shark Permit ~~"Shark Permit"~~ for sale, barter, trade, or exchange;

\* \* \*

B. For management purposes, sharks are divided into the following categories:

1. Small Coastal Sharks - Bonnethead shark, Atlantic sharpnose shark, ~~B~~blacknose shark, ~~F~~finetooth shark.

2. Large Coastal Sharks - Great ~~H~~hammerhead, ~~S~~scalloped ~~H~~hammerhead, ~~S~~smooth ~~H~~hammerhead, ~~N~~nurse shark, ~~B~~blacktip shark, ~~B~~bull shark, ~~E~~lemon shark, ~~S~~sandbar shark, ~~S~~ilky shark, ~~S~~spinner shark, ~~T~~tiger shark.

3. Pelagic Sharks - Porbeagle shark, ~~S~~shortfin mako, ~~B~~blue shark, ~~O~~ceanic whitetip shark, ~~T~~hresher shark.

4. Prohibited Species - Basking shark, ~~W~~white shark, ~~B~~igeye sand tiger, ~~S~~sand tiger, ~~W~~hale shark, ~~S~~smalltooth sawfish, ~~E~~largetooth sawfish, Atlantic angel shark, Caribbean sharpnose shark, ~~S~~smalltail shark, ~~B~~ignose shark, Caribbean reef shark, ~~B~~usky shark, Galapagos shark, ~~N~~narrowtooth shark, ~~N~~ight shark, ~~B~~igeye sixgill shark, ~~B~~igeye thresher shark, ~~E~~longfin mako, ~~S~~sevengill shark, ~~S~~sixgill shark.

C. In addition to all other licenses and permits required by law, a valid original Commercial State Shark Permit ~~"Shark Permit"~~ shall be annually required for persons commercially taking shark from Louisiana waters and for persons selling, exchanging, or bartering sharks as required by law; the valid original permit

shall be in immediate possession of the permittee while engaged in fishing for, possessing, selling, bartering, trading, or exchanging shark.

D. No person shall purchase, sell, exchange, barter or attempt to purchase, sell, exchange, or barter any sharks in excess of any possession limit for which a state or federal commercial permit was issued.

E. 1. All persons who do not possess a Commercial State Shark Permit "~~Shark Permit~~" issued by the Department of Wildlife and Fisheries, and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~Shark Permit~~ issued by the National Marine Fisheries Service, are limited to a recreational possession limit. All persons who do not possess a Louisiana Commercial State Shark Permit "~~Shark Permit~~" and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~permit~~ issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks, shall not sell, barter, trade, exchange or attempt to sell, barter, trade or exchange any sharks, or possess any sharks in excess of a recreational possession limit. Sharks taken incidental to menhaden fishing, that are retained on the vessel as part of the harvest, may be retained and sold only as a mixed part of the total harvest, and shall not be retained, held, or sold, purchased, bartered, traded, or exchanged separately. Sharks retained as a result of menhaden fishing shall not exceed legal bycatch allowances for

menhaden fishing as provided for in R.S. 56:324.

2. Legally licensed Louisiana wholesale/retail seafood dealers, retail seafood dealers, restaurants, and retail grocers are not required to hold a Commercial State Shark Permit "~~Shark Permit~~" in order to purchase, possess, exchange, barter and sell any quantities of sharks, so long as they maintain records as required by R.S. 56:306.5 and R.S. 56:306.6.

F. Sharks taken under a recreational bag limit shall not be sold, purchased, exchanged, traded, bartered, or attempted to be sold, purchased, exchanged, traded, or bartered. A person subject to a bag limit shall not possess at any time, regardless of the number of trips or the duration of a trip, any shark in excess of the recreational bag limits or less than minimum size limits as follows:

1. All sharks taken under a recreational bag limit within or without Louisiana waters must be at least 54 inches fork length, except that the minimum size limit does not apply for Atlantic sharpnose or bonnethead sharks.

2. Owners/operators of vessels other than those taking sharks in compliance with a state or federal commercial permit are restricted to No no more than one shark from either the large coastal, small coastal or pelagic group ~~not taken under a commercial permit may be retained~~ per vessel per trip within or without Louisiana waters, subject to the size limits described in LAC 76:VII.357(F)1, and, in addition, no person shall possess more

~~than one Atlantic sharpnose shark and one bonnethead shark may be retained per person per trip within or without Louisiana waters. Regardless of the length of a trip, no more than one Atlantic sharpnose shark per person may be possessed.~~

3. All owners/operators of vessels recreationally fishing for and/or retaining regulated Atlantic Highly Migratory Species (Atlantic tunas, sharks, swordfish and billfish) in or from the EEZ must obtain and possess a Federal Atlantic Highly Migratory Species Angling permit.

G. Those persons possessing a Federal Commercial Directed or Incidental Limited Access Shark Permit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks are limited to daily take, trip and possession limits as specified in that Federal Permit. Regardless of where fishing a A person aboard a vessel for which a Federal Shark Permit has been issued shall not retain, possess, barter, trade, or exchange shark of any species group for which the commercial quota has been reached and the season closed in Federal waters.

H. 1. A vessel that has been issued or possesses a federal Commercial Directed or Incidental Limited Access sShark pPermit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of the designated trip limits, as established under the Atlantic Highly Migratory Species

Plan and published in the Federal Register, 4,000 pounds, dressed weight regardless of where taken. No person shall purchase, barter, trade, or exchange shark in excess of the designated trip limits 4,000 pounds, dressed weight, or from any person who does not possess a Louisiana Commercial State Shark Permit ~~shark permit~~ or ~~f~~Federal Commercial Directed or Incidental Limited Access ~~p~~Permit, if applicable.

2. Persons possessing a Commercial State Shark Permit ~~Louisiana "Shark Permit"~~ shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of 4,000 pounds, dressed weight, taken from Louisiana state waters.

3. Wholesale/retail seafood dealers who receive, purchase, trade for, or barter for Atlantic sharks, taken from the EEZ, from a fishing vessel must possess a valid Federal Dealer Permit.

I. A person aboard a vessel for which a ~~f~~Federal Commercial Directed or Incidental Limited Access ~~s~~Shark ~~p~~Permit has been issued, or persons aboard a vessel fishing for or possessing shark in the EEZ shall comply with all applicable federal regulations.

J. Fins

\* \* \*

2. ~~Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with~~

~~the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are disproportionate to the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered. All sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore.~~

3. ~~Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing. Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are in excess of 5 percent of the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered.~~

4. ~~Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing.~~

5. ~~All mako sharks possessed aboard a commercial fishing vessel shall have fins intact.~~

M. Seasonal Closures

1. All Louisiana State waters out to the seaward boundary of the Louisiana Territorial Sea shall be closed to the recreational and commercial harvest of all sharks between April 1 and June 30 of each year. A holder of a Federal Commercial Directed or Incidental Limited Access Shark Permit may legally harvest sharks from Federal waters beyond the Louisiana Territorial Sea and bring those sharks into Louisiana waters for sale within the provisions of that Federal Shark Permit. Effective with this closure, no person shall commercially harvest, purchase, barter, trade, sell or attempt to purchase, barter, trade or sell sharks from the closed area. Effective with the closure, no person shall retain or possess any sharks in the closed area. Sharks taken incidental to shrimp or menhaden fishing in the closed area, that are retained on the vessel as part of the harvest, may be retained only as a mixed part of the total harvest, and shall not be retained; held, purchased, bartered, traded, exchanged, sold or attempted to be purchased, bartered, traded, exchanged or sold.

\* \* \*

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(10), R.S. 56:326(E)(2), R.S. 56:326.1, R.S. 56:326.3, and R.S. 56:320.2(C), and R.S. 325.2(A).

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 25:543 (March 1999), amended LR 27:2267 (December 2001), amended LR.

Interested persons may submit comments relative to the proposed Rule to: Randy Pausina, Marine Fisheries Division, Department of Wildlife and Fisheries, Box 98000, Baton Rouge, LA 70898-9000, prior to Thursday, April 8, 2004.

The Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

In accordance with Act#1183 of 1999, the Department of Wildlife and Fisheries/Wildlife and Fisheries Commission hereby issues its Family Impact Statement in connection with the preceding Notice of Intent: This Notice of Intent will have no impact on the six criteria set out at R.S. 49:972(B).

Bill A. Busbice, Jr.

Chairman



## RESOLUTION

### MODIFICATION OF SHARK HARVEST RULES

adopted by the  
Louisiana Wildlife and Fisheries Commission  
February 5, 2004

WHEREAS, regulations promulgated by the Louisiana Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, have provided rules for the harvesting of sharks in Louisiana's state waters, and

WHEREAS, NMFS has adopted management measures for sharks harvested in the EEZ off of Louisiana, and

WHEREAS, adoption of compatible regulations for Louisiana state waters where feasible would enhance effectiveness and enforceability of the regulations already in place for sharks harvested in the EEZ off of Louisiana, and

WHEREAS, substantial fisheries for sharks do also occur in Louisiana state waters that are significant to the citizens of the State of Louisiana and thus enactment of compatible regulations may also impact those persons involved in those fisheries, and

WHEREAS, R.S. 56:6(10), 56:326(E)(2), 56:326.1, and 56:326.3 provide authority for adoption of this rule through the Wildlife and Fisheries Commission, and

WHEREAS, R.S. 56:325.2(A) provides that all sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore,

THEREFORE BE IT RESOLVED, that the Wildlife and Fisheries Commission hereby promulgates a Notice of Intent to modify existing regulations to incorporate federal law and regulation changes for sharks as part of the state regulations, clarifies the existing rule, and


BE IT FURTHER RESOLVED, the complete copy of the Notice of Intent and proposed rule are attached to and made part of this resolution, and

BE IT FURTHER RESOLVED, that this Rule shall become effective upon promulgation, and

BE IT FURTHER RESOLVED, that the Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.



Bill A. Busbice, Jr., Chairman  
Wildlife and Fisheries  
Commission



Dwight Landreneau, Secretary  
Department of Wildlife and  
Fisheries

## NOTICE OF INTENT

Department of Wildlife and Fisheries  
Wildlife and Fisheries Commission

### Sharks and Sawfishes

The Wildlife and Fisheries Commission does hereby give notice of its intent to amend a Rule, LAC 76:VII.357, modifying the existing rule. Authority for adoption of this Rule is included in R.S. 56:6(10), 56:320.2(C), 56:325.2 (A), 56:326.1, 56:326.3, and 56:326(E)(2). Said Rule is attached to and made a part of this Notice of Intent.

## Title 76

### WILDLIFE AND FISHERIES

#### Part VII. Fish and Other Aquatic Life

#### Chapter 3. Saltwater Sport and Commercial Fishery

#### §357. Sharks and Sawfishes - Harvest Regulations

A. The following rules and regulations are established for the taking and possession of sharks (including sawfishes) (Class Elasmobranchiomorphi: Orders Hexanchiformes, Lamniformes, Squaliformes, and Rajiformes) from within or without Louisiana waters. The provisions of this Section shall not apply to shrimp or menhaden harvest, and nothing contained herein is intended or shall be construed to repeal, amend, or otherwise modify the provisions of law applicable to shrimp or menhaden fishing, except for provisions:

1. outlawing finning of shark;

2. requiring a Commercial State Shark Permit "~~Shark Permit~~" for sale, barter, trade, or exchange;

\* \* \*

B. For management purposes, sharks are divided into the following categories:

1. Small Coastal Sharks - Bonnethead shark, Atlantic sharpnose shark, ~~B~~blacknose shark, ~~F~~finetooth shark.

2. Large Coastal Sharks - Great ~~H~~hammerhead, ~~S~~scalloped ~~H~~hammerhead, ~~S~~smooth ~~H~~hammerhead, ~~N~~nurse shark, ~~B~~blacktip shark, ~~B~~bull shark, ~~L~~emon shark, ~~S~~sandbar shark, ~~S~~ilky shark, ~~S~~spinner shark, ~~T~~tiger shark.

3. Pelagic Sharks - Porbeagle shark, ~~S~~shortfin mako, ~~B~~blue shark, ~~O~~ceanic whitetip shark, ~~T~~hresher shark.

4. Prohibited Species - Basking shark, ~~W~~white shark, ~~B~~bigeye sand tiger, ~~S~~sand tiger, ~~W~~hale shark, ~~S~~smalltooth sawfish, ~~L~~argetooth sawfish, Atlantic angel shark, Caribbean sharpnose shark, ~~S~~malltail shark, ~~B~~ignose shark, Caribbean reef shark, ~~B~~dusky shark, Galapagos shark, ~~N~~narrowtooth shark, ~~N~~ight shark, ~~B~~bigeye sixgill shark, ~~B~~bigeye thresher shark, ~~L~~ongfin mako, ~~S~~evengill shark, ~~S~~ixgill shark.

C. In addition to all other licenses and permits required by law, a valid original Commercial State Shark Permit "~~Shark Permit~~" shall be annually required for persons commercially taking shark from Louisiana waters and for persons selling, exchanging, or bartering sharks as required by law; the valid original permit

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shall be in immediate possession of the permittee while engaged in fishing for, possessing, selling, bartering, trading, or exchanging shark.

D. No person shall purchase, sell, exchange, barter or attempt to purchase, sell, exchange, or barter any sharks in excess of any possession limit for which a state or federal commercial permit was issued.

E. 1. All persons who do not possess a Commercial State Shark Permit ~~"Shark Permit"~~ issued by the Department of Wildlife and Fisheries, and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~Shark Permit~~ issued by the National Marine Fisheries Service, are limited to a recreational possession limit. All persons who do not possess a Louisiana Commercial State Shark Permit ~~"Shark Permit"~~ and, if applicable, a Federal Commercial Directed or Incidental Limited Shark Permit ~~permit~~ issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks, shall not sell, barter, trade, exchange or attempt to sell, barter, trade or exchange any sharks, or possess any sharks in excess of a recreational possession limit. Sharks taken incidental to menhaden fishing, that are retained on the vessel as part of the harvest, may be retained and sold only as a mixed part of the total harvest, and shall not be retained, held, or sold, purchased, bartered, traded, or exchanged separately. Sharks retained as a result of menhaden fishing shall not exceed legal bycatch allowances for

menhaden fishing as provided for in R.S. 56:324.

2. Legally licensed Louisiana wholesale/retail seafood dealers, retail seafood dealers, restaurants, and retail grocers are not required to hold a Commercial State Shark Permit ~~"Shark Permit"~~ in order to purchase, possess, exchange, barter and sell any quantities of sharks, so long as they maintain records as required by R.S. 56:306.5 and R.S. 56:306.6.

F. Sharks taken under a recreational bag limit shall not be sold, purchased, exchanged, traded, bartered, or attempted to be sold, purchased, exchanged, traded, or bartered. A person subject to a bag limit shall not possess at any time, regardless of the number of trips or the duration of a trip, any shark in excess of the recreational bag limits or less than minimum size limits as follows:

1. All sharks taken under a recreational bag limit within or without Louisiana waters must be at least 54 inches fork length, except that the minimum size limit does not apply for Atlantic sharpnose or bonnethead sharks.

2. Owners/operators of vessels other than those taking sharks in compliance with a state or federal commercial permit are restricted to ~~No~~ no more than one shark from either the large coastal, small coastal or pelagic group ~~not taken under a commercial permit may be retained~~ per vessel per trip within or without Louisiana waters, subject to the size limits described in LAC 76:VII.357(F)1, and, in addition, no person shall possess more

~~than one Atlantic sharpnose shark and one bonnethead shark may be retained per person per trip within or without Louisiana waters. Regardless of the length of a trip, no more than one Atlantic sharpnose shark per person may be possessed.~~

3. All owners/operators of vessels recreationally fishing for and/or retaining regulated Atlantic Highly Migratory Species (Atlantic tunas, sharks, swordfish and billfish) in or from the EEZ must obtain and possess a Federal Atlantic Highly Migratory Species Angling permit.

G. Those persons possessing a Federal Commercial Directed or Incidental Limited Access Shark Permit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks are limited to daily take, trip and possession limits as specified in that Federal Permit. Regardless of where fishing a A person aboard a vessel for which a Federal Shark Permit has been issued shall not retain, possess, barter, trade, or exchange shark of any species group for which the commercial quota has been reached and the season closed in Federal waters.

H. 1. A vessel that has been issued or possesses a federal Commercial Directed or Incidental Limited Access sShark pPermit issued by the National Marine Fisheries Service under the Federal Fishery Management Plan for Atlantic Sharks shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of the designated trip limits, as established under the Atlantic Highly Migratory Species

Plan and published in the Federal Register, 4,000 pounds, dressed weight regardless of where taken. No person shall purchase, barter, trade, or exchange shark in excess of the designated trip limits 4,000 pounds, dressed weight, or from any person who does not possess a ~~Louisiana~~ Commercial State Shark Permit ~~shark permit~~ or ~~f~~Federal Commercial Directed or Incidental Limited Access ~~p~~Permit, if applicable.

2. Persons possessing a Commercial State Shark Permit ~~Louisiana "Shark Permit"~~ shall not possess on any trip, or land from any trip, or sell, barter, trade, or exchange Large Coastal Species in excess of 4,000 pounds, dressed weight, taken from Louisiana state waters.

3. Wholesale/retail seafood dealers who receive, purchase, trade for, or barter for Atlantic sharks, taken from the EEZ, from a fishing vessel must possess a valid Federal Dealer Permit.

I. A person aboard a vessel for which a ~~f~~Federal Commercial Directed or Incidental Limited Access ~~s~~Shark ~~p~~Permit has been issued, or persons aboard a vessel fishing for or possessing shark in the EEZ shall comply with all applicable federal regulations.

J. Fins

\* \* \*

2. ~~Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with~~



~~the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are disproportionate to the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered. All sharks possessed by a recreational fisherman shall be maintained with head and fins intact and shall not be skinned until set or put on shore.~~

3. ~~Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing. Shark fins that are possessed aboard or offloaded from a fishing vessel must not exceed 5 percent of the weight of the shark carcasses. All fins must be weighed in conjunction with the weighing of the carcasses at the vessel's first point of landing and such weights of the fins landed must be recorded on dealer records in compliance with R.S. 56:306.5 and R.S. 56:306.6. Fins from shark harvested by a vessel that are in excess of 5 percent of the weight of the carcasses landed shall not be sold, purchased, traded, or bartered or attempted to be sold, purchased, traded, or bartered.~~

4. ~~Shark fins shall not be possessed aboard a fishing vessel after the vessel's first point of landing.~~

5. ~~All mako sharks possessed aboard a commercial fishing vessel shall have fins intact.~~

\* \* \*

M. Seasonal Closures

1. All Louisiana State waters out to the seaward boundary of the Louisiana Territorial Sea shall be closed to the recreational and commercial harvest of all sharks between April 1 and June 30 of each year. A holder of a Federal Commercial Directed or Incidental Limited Access Shark Permit may legally harvest sharks from Federal waters beyond the Louisiana Territorial Sea and bring those sharks into Louisiana waters for sale within the provisions of that Federal Shark Permit. Effective with this closure, no person shall commercially harvest, purchase, barter, trade, sell or attempt to purchase, barter, trade or sell sharks from the closed area. Effective with the closure, no person shall retain or possess any sharks in the closed area. Sharks taken incidental to shrimp or menhaden fishing in the closed area, that are retained on the vessel as part of the harvest, may be retained only as a mixed part of the total harvest, and shall not be retained, held, purchased, bartered, traded, exchanged, sold or attempted to be purchased, bartered, traded, exchanged or sold.

\* \* \*

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(10), R.S. 56:326(E)(2), R.S. 56:326.1, R.S. 56:326.3, and R.S. 56:320.2(C), and R.S. 325.2(A).

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 25:543 (March 1999), amended LR 27:2267 (December 2001), amended LR\_\_\_\_\_.

Interested persons may submit comments relative to the proposed Rule to: Randy Pausina, Marine Fisheries Division, Department of Wildlife and Fisheries, Box 98000, Baton Rouge, LA 70898-9000, prior to Thursday, May 6, 2004.

The Secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this notice of intent and the final rule, including but not limited to, the filing of the fiscal and economic impact statements, the filing of the notice of intent and final rule and the preparation of reports and correspondence to other agencies of government.

In accordance with Act#1183 of 1999, the Department of Wildlife and Fisheries/Wildlife and Fisheries Commission hereby issues its Family Impact Statement in connection with the preceding Notice of Intent: This Notice of Intent will have no impact on the six criteria set out at R.S. 49:972(B).

Bill A. Busbice, Jr.

Chairman

-----Original Message-----

From: Murphy, Mike [mailto:Mike.Murphy2@fwc.state.fl.us]  
Sent: Tuesday, February 03, 2004 10:32 AM  
To: pausina\_rb@wlf.state.la.us  
Cc: Barbieri, Luiz; Assess  
Subject: Stock Assessment reviews

Hello Randy,

I've looked over the Stock Assessment sections of your reports on southern flounder, striped mullet, sheepshead, and black drum. These appear to be consistent with your past reports so I will not re-iterate my comments about the biases associated with the use of equilibrium techniques. It is encouraging to see that annual age-composition data are now being collected for these species and we look forward to seeing the results of non-equilibrium analyses in the future. Good luck with the presentation to your Commission.

Take care,

Mike

## BLACK DRUM SUMMARY OF CHANGES FROM 2003 ASSESSMENT

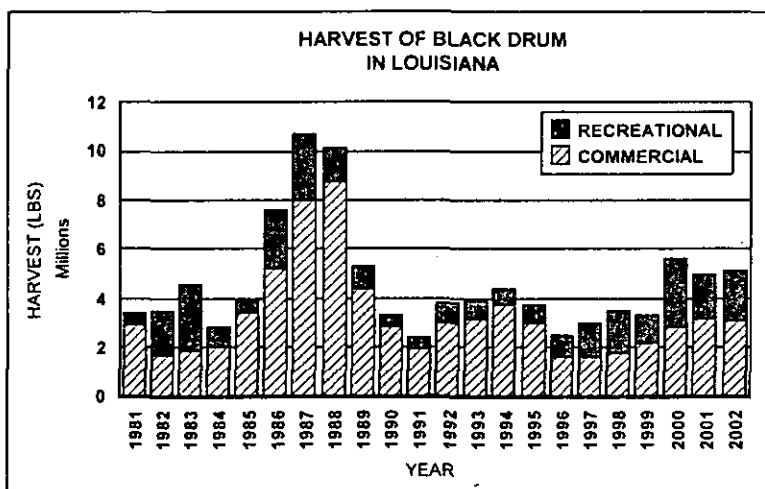
This summary is intended to provide a quick reference of substantive changes in methods or corrections in this year's assessment from the 2003 assessment conducted for black drum.

- There are no substantive changes in methods from the 2003 assessment.

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### 2004 DOCUMENT HIGHLIGHTS

- The 2002 combined commercial and recreational harvest of 5,132,793 pounds was the second highest recorded since 1989. It was 492,845 pounds lower than 2000's fourteen year high and 48% of 1987 landings peak.
- The results of YPR analysis indicate that if  $M=0.1$  (the most conservative value within the range of estimates), the fishery prior to existing regulations (Act 1316) was operating above  $F_{0.1}$  and below  $F_{MAX}$  with yield of 92% of maximum, and SPR at 44%. An  $M$  of 0.15 or 0.2 would indicate a more lightly fished stock with yield being 66% to 45% of maximum and with SPR being 57% to 66% respectively.
- It should be noted that the method used in this assessment to determine the status of the stock, reflected in the estimates of disappearance, is not immediately sensitive to changes in regulations. Black drum enter the fishery at age 0 and are fully recruited by age 5. It takes several years of consistent regulations after regulations are imposed before the impact of those regulations can be measured. In the case of black drum it would take 6 years of consistent regulations assuming selectivities of age 5 and older is 100%.
- As a result of having several years of commercial trip ticket data, and collecting recreational fishery statistics data, the department was able to begin a program to representatively sample fishery dependent otoliths in 2002. The program uses trip ticket data and recreational survey data to weight sampling sites for the collection of otoliths for the species of interest. It is expected that this method of otolith sampling will improve stock assessments by providing more accurate annual catch-at-age data.



## BLACK DRUM

### 5.0 STOCK ASSESSMENT

This assessment uses yield-per-recruit (YPR) and Spawning Potential Ratio (SPR) to estimate the impact of fishing pressure on potential yield and the spawning potential of the black drum stock in Louisiana waters. Estimates derived from YPR and SPR are based on information regarding the growth rate and spawning potential of the fish, and on estimated natural mortality rate (M) and fishing mortality rate (F) on the stock. The results from this assessment provide a generalized approach towards estimating the impact of fishing on the spawning potential and potential yield of the fish stock. The spawning biomass of females is assumed to be the factor limiting the spawning potential of the stock; therefore, where possible, only data on female black drum are used. Yield-per-recruit and SPR analysis, as with many other generalized assessments, should be used only as a guide until a more comprehensive assessment can be conducted.

In developing a stock assessment, the unit stock must be defined. While a unit stock is often represented by that portion of the population which is genetically similar, for our purpose, the most applicable definition seems to be one which considers the unit stock as that portion of the population which is either dependent on Louisiana waters, or which is available to Louisiana fishermen.

#### 5.1 Growth

Luquet et al. (1996) presents several growth equations for black drum. The one chosen for this assessment was developed by Geaghan and Garson (unpublished), and is a sloped asymptote model fitted to a von Bertalanffy growth equation. The data used by Geaghan and Garson (unpublished) was from Beckman et al. (1988) who used otolith sections in aging fish caught in Louisiana waters. The sloped asymptote model proved to fit the data better than did other equations. The equation is as follows:

$$L_t = (610 + 9.959 * t) * (1 - e^{-0.6226(t-0.1229)})$$

where,  $L_t$  = length at age  $t$ , and  $t$  = age in years.

The length-weight regression described by Beckman et al. (1990) from fish harvested in Louisiana was used in this assessment. The equation is as follows:

$$W = (1.14 * 10^{-5}) FL^{3.05}$$

where,  $W$  = weight in grams, and  $FL$  = fork length in millimeters.

#### 5.2 Natural Mortality

Natural mortality ( $m$ ) is one part of total mortality ( $Z$ ) and is the mortality due to all causes other than fishing. These include predation, disease, spawning stress, starvation, and old age.

Typically, natural mortality is estimated, as it is difficult to directly measure, especially on exploited fish stocks where natural mortality and fishing mortality occur simultaneously.

This assessment follows the former Louisiana Department of Wildlife and Fisheries (1990) assessment in using a range of values for natural mortality (0.1, 0.15, 0.2) to evaluate the sensitivity of  $M$  on the resulting spawning stock.

### **5.3 Fishing Mortality**

Fishing mortality ( $F$ ) estimates derived in the former Louisiana Department of Wildlife and Fisheries (1990) assessment were used in this assessment to evaluate the impact of current fishing regulations on the spawning potential of the stock. The former assessment did not address the concept of spawning potential as a management measure. The current assessment uses yield-per-recruit and SPR analysis to estimate the impact of fishing on spawning potential.

The former assessment used the growth equation described in Section 5.1 to develop annual catch-at-age tables.

### **5.4 Yield-per-Recruit**

Yield-per-recruit and SPR analysis provide basic information about the dynamics of a fish stock by estimating the impact of mortality on yield and the spawning potential of the stock. The results can be examined as to the sensitivity of natural and fishing mortality rates on yield and spawning potential.

The growth parameters described in Section 5.1, the age-specific fishing mortality rates described in Section 5.3, and the natural mortality rates described in Section 5.2 were incorporated into the yield-per-recruit and spawning potential analysis. Fecundity estimates derived by Nieland and Wilson (1993) were used to estimate spawning potential. The equation is as follows:

$$BF = 49,249 * \text{Age} + 530,052$$

where,  $BF$ =batch fecundity. The results are presented in Table 5.1, which contains estimates of  $F_{MAX}$  (fishing mortality rate that produces maximum yield),  $F_{0.1}$  (fishing mortality rate representing 10% of the slope at the origin of a yield-per-recruit curve),  $F_{20\%SPR}$  (fishing mortality that produces 20% SPR),  $F_{30\%SPR}$  (fishing mortality that produces 30% SPR), and estimates of  $F$  from Section 5.3.

### **5.5 Conservation Standards**

Conservation standards are intended to protect the viability of a fish stock for future generations. These standards have historically been based on a number of biological measures of the dynamics of fish stocks, depending on the availability and adequacy of data. Conservation standards should be separated into two types: a conservation threshold which is entirely biologically based and, a conservation target which considers biological measures modified by relevant social,

economic, and ecological factors. A conservation threshold is a biological baseline for the harvest of a fish stock and should not be exceeded. It is the highest level of fishing mortality that will ensure that recruitment overfishing will not occur. Beyond the conservation threshold, a conservation target may be set, *providing for other management goals in the fishery*. Such goals may include maximizing yield in weight or numbers of fish, economic benefits or profit, employment, or some other measurable goal. These targets should be set at a fishing mortality rate below that of the conservation threshold in order to ensure that the biological integrity of the stock is not damaged by fishing.

The spawning potential ratio (SPR) concept described by Goodyear (1989), is a species specific value expressed as the ratio of the spawning stock biomass (or egg production) per recruit (SSB/R) in a fished condition to the SSB/R in an unfished condition. The concept is based on the premise that below some level of SPR, recruitment will be reduced. Goodyear (1989), recommends that in the absence of sufficient data to provide a value specific to the stock in question an SPR of 20% be used as a threshold. Work on North Atlantic ground fisheries also resulted in the calculation of a threshold SPR of 20% (Gabriel et al. 1984, Gabriel 1985). An SPR of 20% has been recommended for Spanish and king mackerel in the Gulf of Mexico (National Oceanic and Atmospheric Administration/National Marine Fisheries Service 1995), while an SPR of 8-13% has been demonstrated to be sufficient for gulf menhaden (Vaughan 1987). In earlier analyses of Louisiana spotted seatrout fisheries (Louisiana Department of Wildlife and Fisheries 1991), an SPR threshold of 15% was recommended based on several years of data. Mace and Sissenwine (1993) examined 90 stocks of 27 species, and reported that the average replacement SPR for all these stocks was 18.7%, while the most resilient quarter of the stocks required a maximum of only 8.6%. These authors recommended that an SPR of 30% be maintained when there is no other basis for estimating the replacement level, as this level was sufficient in maintaining recruitment for 80% of the stocks examined. However, they noted that 30% may be overly conservative for an "average" stock, and reiterated the need for stock-specific evaluations of standards to enhance both safety and benefits in the fishery.

Sufficient information is not available to directly estimate a conservation threshold for black drum in Louisiana. However, the conservation target of 30% SPR established by the 1995 Regular Session of the Louisiana Legislature for black drum, southern flounder, sheepshead, and striped mullet appears to be adequate to maintain the black drum stock and prevent recruitment overfishing.

The use of any measure of the health of a fish stock as a perfect index is arguable. It is logical to conclude that growth overfishing should occur at a much lower fishing rate than that which would threaten recruitment. However, Mace and Sissenwine (1993) provide information to suggest that some stocks may have reduced recruitment at levels of fishing that would not reduce yield-per-recruit. The preferable position for making recommendations on appropriate levels of fishing for a stock is to base those recommendations on actual measures of spawning stock size and recruitment for both the species and fishery in question. This requires a base of information resulting from monitoring of both the stock and the fishery over a variety of conditions. Without this information, conservation standards may either underestimate or overestimate the potential of a fishery. If the potential is underestimated, society loses the economic and social benefits of the



harvest. If the potential is overestimated and the fishery is allowed to operate beyond sustainable levels, society loses the benefits of a sustainable fishery, and recovery will require some period of rebuilding, when effort must be reduced from the non-sustainable levels (Hilborn and Walters, 1993).

## **5.6 Status of the Stock**

Black drum were lightly exploited until the early 1980s when commercial harvest began to increase dramatically (Figure 5.1). Commercial landings went from 0.4 million pounds in 1980 to 8.7 million pounds in 1988. Regulations implemented in 1989 reduced the commercial harvest to between 2 and 4 million pounds annually. Regulations implemented by Act 1316 in 1995 may have reduced harvest even further as evidenced from 1996 to 1999; however, landings have increased, and are slightly above 1995 landing level. Commercial landings prior to 1991 were obtained from the National Marine Fisheries Service's (NMFS) General Canvass Landing Program, from 1991 through 1998 it was collected by the Louisiana Department of Wildlife and Fisheries' (LDWF) Monthly Dealer Reports and from 1999 to present LDWF's "Trip Tickets" program is utilized to gather this type of data.

Harvest from the recreational fishery collected through the NMFS's Marine Recreational Fishery Statistics Survey fluctuated, between 0.5 and 2.7 million pounds, for the years prior to regulation (1981-1988), and 0.4 to 2.7 million pounds post-regulations (Figure 5.2). Recreational harvest since regulations were implemented in 1989 have remained relatively stable through 1995. Recent harvest (1996-2002) shows an increasing trend. Mean catch-per-trip from the recreational fishery was calculated by selecting those trips that had black drum in their catch. The results are presented in Figure 5.3 along with 95% confidence limits around the mean. The catch-per-unit-effort (CPUE) indices cycled throughout the period examined (1981-2002), with no indication of a long-term downward trend. The years 1985, 1991 and 1996 showed the lowest mean CPUE and only significantly lower than 1982, 1986, 1993, and 2000. Fisheries dependent recreational landings data are collected through the NMFS's Marine Recreational Fisheries Statistical Survey and currently collected by LDWF Biologists.

Catch-per-effort data from the Department's, fishery-independent trammel net (750' x 6' - 1 5/8" inner, 6" outer wall) and small mesh bag seine (50' - 1/4" delta mesh) samples were calculated as follows:

$$\text{Mean CPUE} = ( \exp ( \sum \ln ( \text{catch} + 1 ) / N ) ) - 1$$

where, catch is the total number caught in each set and, N is the number of samples taken annually. Trammel net and seine data were used for the period 1986-2003. The CPUE fluctuates throughout the time period in both the seine and trammel net samples with no indication of a long-term downward trend (Figure 5.4 and 5.5). The year 1988 was the only year where CPUE in seines showed any significant difference at the 95% confidence level and only lower than 1986, 1992, 1996, 1997, 1998, 1999 and 2000. Trammel net CPUE was highly variable throughout the period as indicated by the wide confidence limits associated with the years examined. The years 1986, 1988

and 1989 had the lowest CPUE, and only significantly lower than 1996, 1998, 1999, 2000, 2001, and 2002.

Commercial harvest methods were changed on August 15, 1995 when Act 1316 of the 1995 Regular Legislative Session, the Marine Resources Conservation Act of 1995, became effective. This act outlawed the use of "set" gill nets or trammel nets in saltwater areas of Louisiana, and restricted black drum harvest by the use of "strike" nets to the period between the third Monday in October and March 1 of the following year. A "Restricted Species Permit" was required in order to harvest black drum, and several criteria were established in order to qualify for that permit. After March 1, 1997, all harvest by gill or trammel nets was banned, and legal commercial gear to harvest black drum was limited to trawl, set lines and hook and line. This set of regulations had the effect of reducing the harvest of black drum by this segment of the commercial fishing industry.

It should be noted that the following results of YPR and SPR analysis do not reflect the impact of current regulations described above. With this type of general assessment, it will take several years before the impact of regulations will be observed in the disappearance rates from the fishery.

The results of YPR analysis indicate that if  $M=0.1$  (the most conservative value within the range of estimates), the fishery prior to existing regulations (Act 1316) was operating above  $F_{0.1}$  and below  $F_{MAX}$  with yield of 92% of maximum, and SPR at 44%. An  $M$  of 0.15 or 0.2 would indicate a more lightly fished stock with yield being 66% to 45% of maximum and with SPR being 57% to 66% respectively (Table 5.1).

Current regulations are as follows: 16 inches minimum total length and 5 fish per person daily bag and possession limit with not more than one exceeding 27 inches for recreationally harvested black drum. For commercially harvested black drum there is a 16 inch minimum total length and an annual harvest quota of 3.25 million pounds for black drum measuring 16-27 inches total length and annual harvest of 300,000 fish measuring longer than 27 inches total length with the fishing year beginning September 1.

### **5.7 Research and Data Needs**

Estimates of natural mortality used in the present assessment show wide variation. This variation reduces the reliability of the present assessment in providing an accurate prediction of the potential yield of the stock, and also reduces the confidence level of the present estimate of SPR. A more precise estimate of natural mortality would assist in both of these problems.

Annual age-length keys should continue to be developed to provide catch-at-age data necessary to conduct age-based population assessments. The department is in the process of collecting otoliths for development of annual age-length keys.

The relationship between wetlands losses or modifications and the continuation of fishery production within the state has been discussed by many authors. However, this relationship is likely

to be different for the various fishery species. Understanding this relationship for black drum should be an ongoing priority.

In the presence of changing regulations, fishery-dependent information is not a reliable source of data for assessing the status of a fish stock. However, such data are necessary to measure the effects of fishing on that stock. Consistent fishery-dependent and fishery-independent data sources, in a comprehensive monitoring plan, are essential to understanding the status of fishery stocks, and to identifying causes of changes in stock abundance. Current programs should be assessed for adequacy with respect to their ability to evaluate stock status, and modified or enhanced to optimize their capabilities.

A research project determining the current age frequency of the adult population should provide valuable insight into the impact of existing regulations. The project should attempt to be representative of the adult black drum population in offshore waters.

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**Table 5.1 - Results of Yield Per Recruit and SPR Analysis for Black Drum**

**M=0.1**

|                 | F Ratio | YPR    | SPR       | %SPR   | %YPR    |            |
|-----------------|---------|--------|-----------|--------|---------|------------|
| Fmax =          | 0.982   | 3.0260 | 1,659,670 | 23.80% | 100.00% | Benchmarks |
| F0.1 =          | 0.260   | 2.4809 | 3,902,316 | 55.96% | 81.99%  |            |
| F20% =          | 1.156   | 3.0159 | 1,394,714 | 20.00% | 99.67%  |            |
| F30% =          | 0.760   | 3.0022 | 2,092,071 | 30.00% | 99.21%  |            |
| * Regulations = | 0.426   | 2.7925 | 3,089,373 | 44.30% | 92.28%  | Estimate   |

**M=0.15**

|                 | F Ratio | YPR    | SPR       | %SPR   | %YPR    |            |
|-----------------|---------|--------|-----------|--------|---------|------------|
| Fmax =          | 2.100   | 2.1766 | 373,755   | 11.48% | 100.00% | Benchmarks |
| F0.1 =          | 0.605   | 1.7506 | 1,466,963 | 45.05% | 80.43%  |            |
| F20% =          | 1.462   | 2.1353 | 651,218   | 20.00% | 98.10%  |            |
| F30% =          | 1.019   | 2.0185 | 976,828   | 30.00% | 92.74%  |            |
| * Regulations = | 0.376   | 1.4562 | 1,880,508 | 57.75% | 66.90%  | Estimate   |

**M=0.2**

|                 | F Ratio | YPR    | SPR       | %SPR   | %YPR    |            |
|-----------------|---------|--------|-----------|--------|---------|------------|
| Fmax =          | 3.822   | 1.8101 | 61,480    | 3.52%  | 100.00% | Benchmarks |
| F0.1 =          | 1.153   | 1.5197 | 545,318   | 31.22% | 83.96%  |            |
| F20% =          | 1.671   | 1.6792 | 349,286   | 20.00% | 92.77%  |            |
| F30% =          | 1.199   | 1.5388 | 523,929   | 30.00% | 85.01%  |            |
| * Regulations = | 0.326   | 0.8173 | 1,375,910 | 66.71% | 45.36%  | Estimate   |

\* Regulations prior to 1995 and Act 1316

Figure 5.1 - Commercial Harvest of Black Drum  
in Louisiana

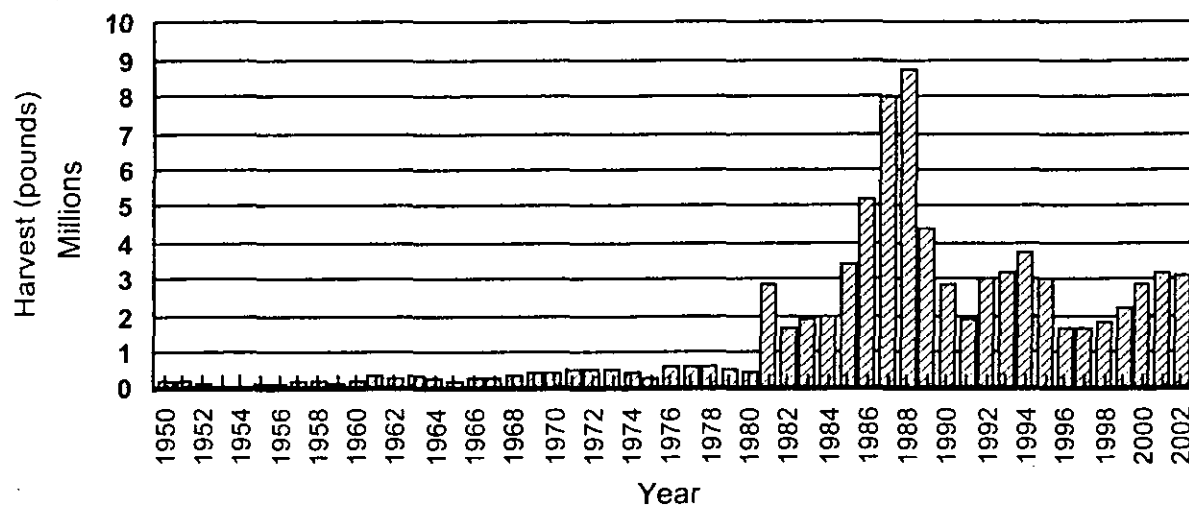


Figure 5.2 - Louisiana Commercial and Recreational Harvest  
of Black Drum

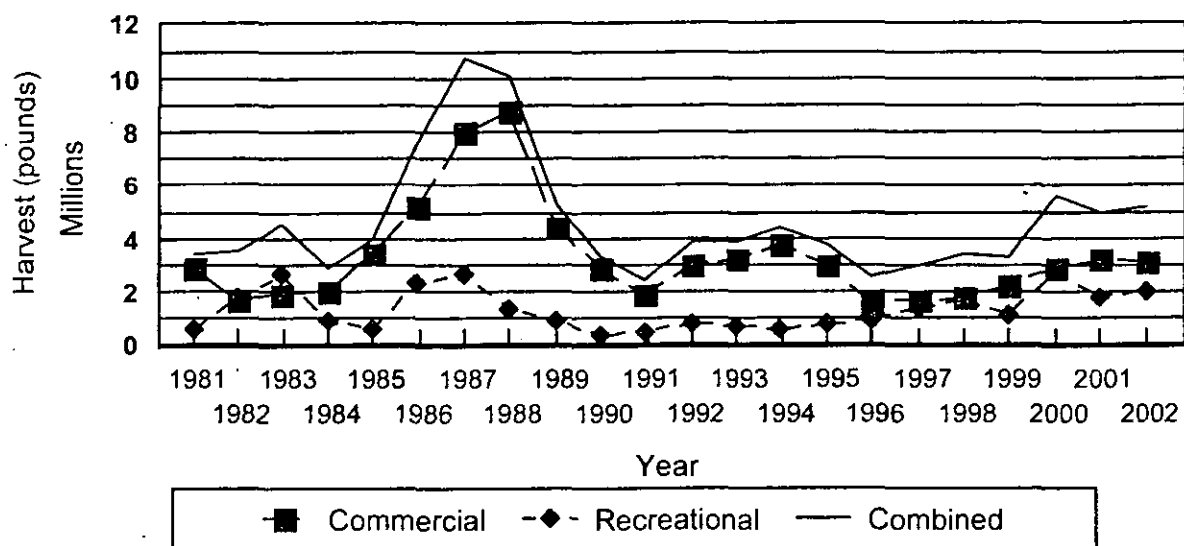


Figure 5.3 - Catch per Effort of Black Drum in Louisiana  
NMFS Marine Recreational Fishery Statistics Survey

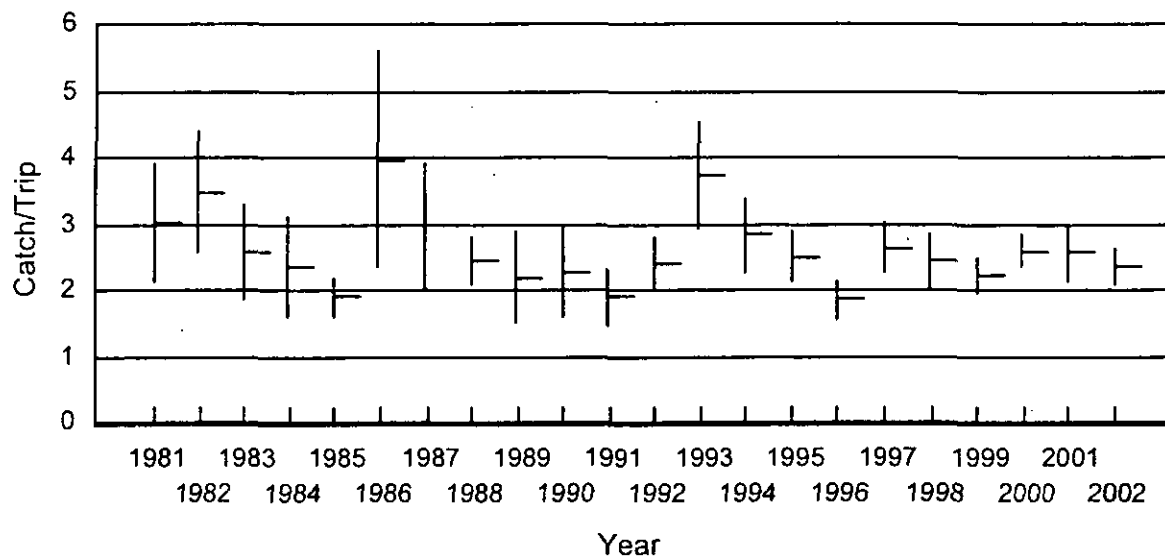


Figure 5.4 - Catch per Effort of Black Drum in Seines  
Marine Fisheries Division, Monitoring Program

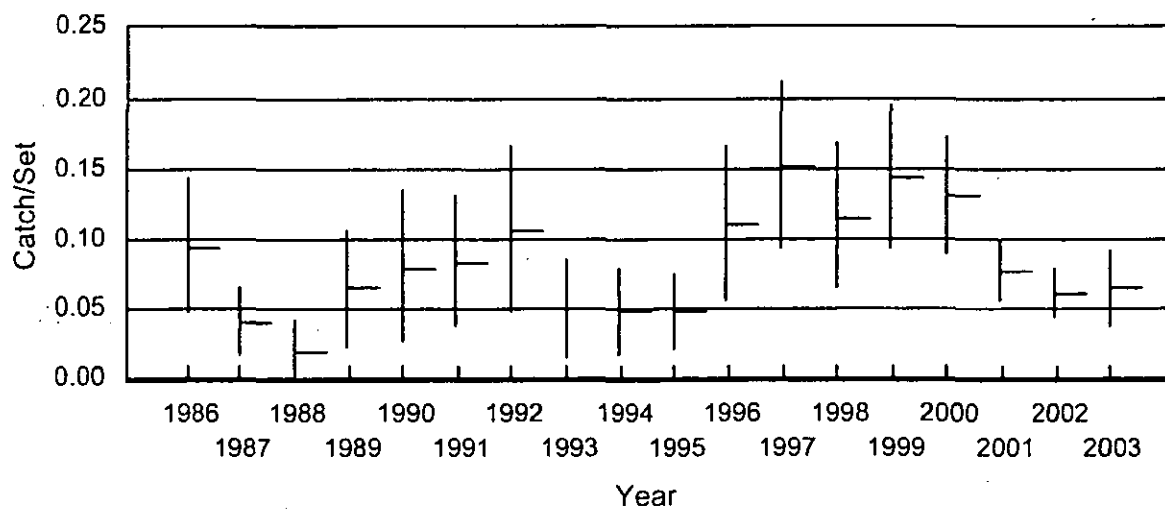
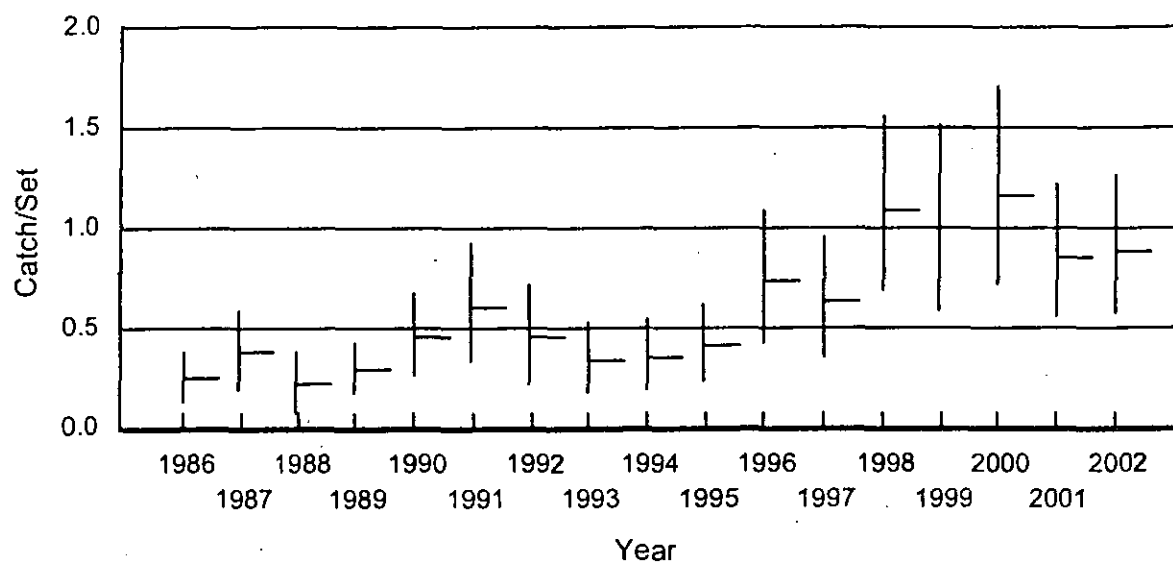




Figure 5.5 - Catch per Effort of Black Drum in Trammel Nets  
Marine Fisheries Division, Monitoring Program



## STRIPED MULLET SUMMARY OF CHANGES FROM 2003 ASSESSMENT

This summary is intended to provide a quick reference of substantive changes in methods or corrections in this year's assessment from the 2003 assessment conducted for striped mullet.

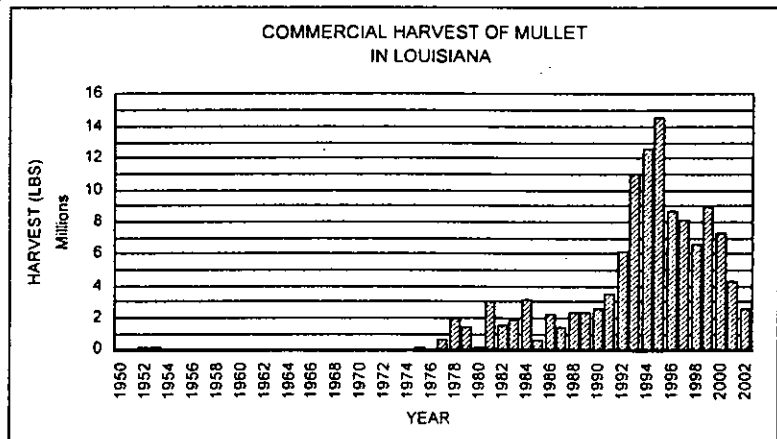
- There are no substantive changes in methods from the 2003 assessment.

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### 2004 DOCUMENT HIGHLIGHTS

- 2002 commercial landing of 2.5 million pounds was the lowest harvest since 1991.

- The results of YPR analysis indicate that if  $M=0.3$  (the most conservative value within the range of estimates), the current fishery is operating above  $F_{0.1}$  and  $F_{MAX}$  with yield of 97 to 99% of maximum, and SPR at 31% to 38%. An  $M$  of 0.6 would indicate a more lightly fished stock with yield being 67% to 88% of maximum and with SPR being 62% to 74%.



- It should be noted that the method used in this assessment to determine the status of the stock, reflected in the estimates of disappearance, is not immediately sensitive to changes in regulations. Mullet enter the fishery at age 1 and are fully recruited by age 5. It takes several years of consistent regulations after regulations are imposed before the impact of those regulations can be measured. In the case of mullet it would take 5 years of consistent regulations assuming selectivities of age 5 and older is 100%.
- As a result of having several years of commercial trip ticket data, and collecting recreational fishery statistics data, the department was able to begin a program to representatively sample fishery dependent otoliths in 2002. The program uses trip ticket data and recreational survey data to weight sampling sites for the collection of otoliths for the species of interest. It is expected that this method of otolith sampling will improve stock assessments by providing more accurate annual catch-at-age data.

## STRIPED MULLET

### 5.0 STOCK ASSESSMENT

This assessment uses yield per recruit (YPR), spawning potential ratio (SPR) and catch curve analyses to estimate the impact of current fishing pressure on the potential yield and the spawning potential of the Louisiana striped mullet stock. Estimates of YPR and SPR are based on knowledge of the growth of the fish, and on estimates of the natural mortality rate ( $M$ ) and fishing pressure ( $F$ ) on the stock. Catch curve analysis is used to estimate the disappearance rates ( $Z'$ ) from the fishery. The spawning biomass of females is assumed to be the factor limiting the spawning potential of the stock. Therefore, this analysis uses growth rates for female mullet, and considers the effects of fishing on the female portion of the stock. The results of this type of assessment provide a generalized approach for estimating the impact of fishing on the spawning potential and the potential yield of the fish stock. As with any assessment, the results are subject to the limitation of the data from which they are derived. The present analysis should be used only as guidance until more comprehensive analyses, using additional data collected consistently over an extended time span, can be conducted.

The definition of the unit stock must be considered in the development of a stock assessment. While a unit stock is often defined as that portion of the population which is genetically similar, for our purpose in this stock assessment, the most applicable definition seems to be one which considers the unit stock as that portion of the stock which is either dependent on Louisiana waters, or which is available to Louisiana fishermen. We recognize that the geographic distribution implicit in this definition of unit stock is likely to be different from the genetically based definition, given the wide geographic distribution and offshore spawning grounds of the species (Mapes *et al.* 1998). We chose to use this definition because it provides the best picture of the Louisiana fishery, and we do not have information with which to quantitatively define fishing mortality on a regional basis. Information from tagging studies along the west coast of Florida (Mahmoudi, 1991) indicate that once recruited to an estuary, mullet have a strong tendency to return to that estuary after spawning offshore. If this tendency is also expressed in Louisiana, then fishing mortality rates in one area of the state would primarily affect the abundance of the adult population in that area, and not in other areas, unless fishing mortality rates over the entire spawning pool were high enough to affect recruitment on a wide scale.

Estimates of fishing mortality are derived with the knowledge that the existing fishery is not evenly distributed over the entire state, but concentrated in the southeastern region, and mainly east of the Mississippi River (over 80% of the harvest is typically from that region). The analysis must assume that either the distribution of the fishery does not change, or that all fish in the state are equally available to the fishery for predictive yield calculations to be reasonably accurate. Without knowledge of movement of adult mullet over the entire year, it is difficult to infer how much of the population is actually exposed to the fishery. Only that portion exposed to the fishery is described here. In order to reduce problems associated with variable growth rates and variable fishing pressures across the state, information for this assessment was limited to that collected from the easternmost part of the state (East of 90°W longitude).

For purposes of this assessment, we did not consider the effects of recreational harvest on the stock. The best information available at this time indicates that recreational harvest is relatively light, typically less than 200,000 pounds of fish per year (National Marine Fisheries Service, Marine Recreational Fishing Statistics Survey, 1981-2000). Based on the sparse length frequency distribution of surveyed fish, most of the recreational harvest is at a size prior to entry into the commercial fishery. The available data suggest that inclusion of recreational harvest data would not have any appreciable effect on the analyses we used (Table 5.1).

This assessment uses a fishing year beginning in February of one year and running through January of the following year for analysis of fishery-dependent information. Thus, the 1998 fishing year, as defined for this report, consists of February 1998 through January 1999. This is to accommodate the existing season for commercial harvest, which runs from the 3<sup>rd</sup> Monday in October until the 3<sup>rd</sup> Monday of the following January. Harvest values are presented for each calendar year rather than fishing year for consistency with other reports.

## **5.1 Growth and Fecundity**

Thompson *et al.* (1991) described growth of striped mullet from Louisiana waters. They found significant differences in growth rates between sexes of mullet, and in growth rates from different parts of the state. For this assessment, a von Bertalanffy growth equation was developed from aged samples of female striped mullet from East of the Mississippi River provided by Thompson (pers. comm.). Growth rates from this area were used since this area of the state provides the majority of the harvest. We reanalyzed these data, combining them with juveniles assigned to age 0 by length frequency analysis from Louisiana Department of Wildlife and Fisheries' (LDWF) fishery-independent seine samples (Mapes *et al.* 1998, Figure 2.1). These data were used to estimate a three-parameter von Bertalanffy growth equation:

$$L_t = L_{\infty} * (1 - e^{-k(t-t_0)})$$

where  $L_t$  is the length at age ( $t$ ) in years,  $L_{\infty}$  is the maximum length,  $k$  is a parameter describing the rate of growth, and  $t_0$  is the intercept of the function on the time axis. The function was estimated using nonlinear approximation procedure (SAS, 1987). The parameters derived from this method were:  $L_{\infty}=453.9$ ,  $k=0.332$ ,  $t_0=-0.05$ . These parameters were used in some methods of estimating natural mortality, and for yield estimation.

Samples were assigned ages through use of an age-length key developed from otolith aging of fish by Thompson (unpublished data) and LDWF's ongoing aging study. The age-length key categorized fish in increments of one-inch (25.4 mm) total length. Fish with only fork length measurements available were converted to total length using the equation provided by Thompson *et al.* (1991) ( $TL=1.13*FL-3.40$ ,  $r^2=.995$ ). Only data from female mullet was included (males, immature fish, and fish where sex was not recorded were all deleted). Data from purse seine samples from Mississippi waters, and from mullet in the Sabine (LA) Refuge impoundment were deleted from the LSU dataset, as the length/age relationships for these fish are expected to differ

from the fish harvested in the ongoing Louisiana fishery. Most fishery-independent collections were deleted from the dataset for the same reason. However, the age distribution for 11-inch fish was derived from fishery-independent samples since no fishery-dependent ages were available for that size class. This size class represented less than one percent of the total harvest, so any error due to misassignment of ages should have minimal impact on the assessment. In all 3,580 female mullet were used in the development of the age-length-key (Table 5.2).

As noted earlier, the fishery is concentrated in the area east of the Mississippi River, and in the Mississippi River delta. Examination of fishery-dependent age-length keys and length-frequency samples from different areas of the state demonstrated substantial differences in length-frequency and in age-at-length between areas. Therefore only samples taken East of 90°W longitude were included in this assessment. Exclusion of the samples from the remainder of the state should provide a more accurate assessment of the potential yield of this area, where the majority of the fishery operates. Spawning potential ratio (SPR) estimates specifically calculated by this method would not be valid for the state as a whole, but should be more accurate representation of the status of the fished portion of the population in this region.

Fecundity is estimated from the length/fecundity relationship of Thompson *et al.* (1991) where:

$$\text{Fecundity} = 5.6 \times 10^{-3} (\text{FL})^{3.18}$$

Fish were assumed to be sexually mature at age 2.

## 5.2 Natural Mortality

There was no change in the techniques used or the input parameters for estimation of natural mortality for striped mullet since the development of the 1997 and 1998 reports. The various estimates and the citation describing the methodology used to derive that estimate are listed below.

| Citation                 | Input parameters   | Natural Mortality estimate   |
|--------------------------|--|--|
| Pauly (1980)             | $k = 0.332$<br>$L_{\infty} = 453.9$<br>$\bar{X}$ water temperature (°C) = 22.7 | $M_{\text{schooling fish}} (\text{est.} * 0.8) = 0.56$<br>$M_{\text{clupeids}} (\text{est.} * 0.6) = 0.42$ |
| Hoenig (1983)            | $\text{Age}_{(\text{max})} = 10$   | $M = 0.42$   |
| Alagaraja (1984)         | 99% of fish die by Age 10<br>99.9 % of fish die by Age 10                      | $M_{1\%} = 0.46$<br>$M_{0.1\%} = 0.69$   |
| Beverton and Holt (1959) | 1.5 to 2.5 von Bertalanffy growth parameter (k), $k = 0.332$                   | $M = 0.50 - 0.83$  |

Two estimates of natural mortality (M) are available for striped mullet in the existing literature. Pauly (1980) cites Ih-Hsiu (1970) as reporting an M of 0.31 for male striped mullet from

Taiwan. Mahmoudi (1991) estimated  $M$  as 0.30 using tagging data from southwest Florida.

Some investigators (Restrepo *et al.* 1991, Helser *et al.* 1992) have attempted to use a range of estimates of  $M$  and incorporate variation within this range as a variable in their analyses of other fish species. However, the selection of the range to be used, and the distribution of  $M$  estimates within that range remains arbitrary. We have chosen, rather, to select several point estimates of  $M$ , and to present the results of changes in the estimate. We have presented estimates based on  $M$  values of 0.3, 0.4, 0.5, and 0.6. This provides a feeling for the differences resulting from various estimates of  $M$ , without implying any additional precision.

In this report, an  $M$  of 0.3 is the most conservative estimate of natural mortality. This estimate may be low, based on the lack of mullet older than 10 years in the Western part of Louisiana, though there was no established mullet fishery in that area when the samples were taken. Using a low value of  $M$  results in higher estimates of  $F$  in the analysis. If the actual value is above estimates used here, estimates of fishing mortality from catch curve analysis will be lower than estimated here. Additionally estimates of spawning potential ratio at any level of fishing mortality would also be increased, and potential yield will be higher than estimated with that value. A low estimate of  $M$  would also increase the harvest age structure required to maximize yield, which could influence proposed size or gear regulations.

### **5.3 Disappearance Rates and Fishing Mortality**

It must be recognized that any estimate of disappearance ( $Z'$ ) from the fishery includes both the total mortality while the fish is exposed to the fishery, and the availability of the fish to the gear. Availability as used here includes both changes in distribution or behavior of the fish that might change effectiveness of the fishery (e.g. migration, food preference, etc.), and size or other selectivity of the gear or fishery. The predominant gear in the Louisiana mullet fishery at the present time is a 3½ -4 inch stretch gill net, though some larger mesh sizes are occasionally used (see Mapes *et al.*, 1998). Gill nets are size selective for mullet, therefore estimates of disappearance likely reflect fishing mortality confounded by some degree of gear selectivity. For the present analysis, no estimation of gear selectivity or availability to capture was available for fish past full recruitment.

Length frequency data from the mullet fishery, derived from Trip Intercept Program (TIP) sampling (LDWF unpubl. data), are available for the fishing years 1994-2001. These samples were aged, using an age-length key (Table 5.2).

Catch-at-age from the fishery for the years 1994-2001 was used to derive age-specific selectivities to be used in yield-per-recruit analysis. The method presented in Sparre and Venema (1992) was used to develop selectivities. This method uses a linearized catch curve to determine the selectivity of fish not yet fully recruited to the fishery. The ratio of the observed catches to the expected catches at each age is the probability of capture or selectivity of the fishery at age. Selectivities are then regressed in the equation:

$$\ln(1/S_t - 1) = T1 - T2 * t$$

where,  $S_t$  = the selectivity at age  $t$ , and  $T1$  and  $T2$  are constants corresponding to the intercept and slope of the regression. To develop theoretical or estimated selectivities at age the following equation is used:

$$S_t(\text{estimate}) = 1 / (1 + \exp(T1 - T2 * t))$$

Selectivities for ages up to full age-at-recruitment were used to describe the relative fishing mortality to that point; for age at full recruitment and older, selectivities are assumed to be 1, or 100% selected. Selectivities are as follows:

| Ages (Females) | Relative selectivity |
|----------------|----------------------|
| 0              | 0                    |
| 1              | 0.0011               |
| 2              | 0.0372               |
| 3              | 0.2616               |
| 4              | 0.7780               |
| 5 and over     | 1.0                  |

Disappearance rates ( $Z'$ ) were derived by regression of the descending arm of the catch curve. The resulting estimates of  $Z'$  (X Coefficient) are provided in table 5.3.

These estimates of  $Z'$  and relative selectivity could be confounded by variable sizes of cohorts within the fishery. Variation in cohort size could skew the estimate of  $Z'$  in either a positive or negative direction, depending on the distribution of the various cohorts within the fishery. Greater recruitment in the older year classes would provide a lower estimate of  $Z'$ , while if in younger ages, would provide an overestimate of the true value of  $Z$ . This uncertainty can only be addressed by use of several years of information on the fishery, and using estimates of  $Z$  based on specific cohorts rather than using annual estimates, that run across several cohorts.

#### **5.4 Yield per Recruit**

Yield per recruit (YPR) analysis provides basic information about the dynamics of a fish stock by estimating the impact of mortality rates on yield and spawning potential of the stock. The results can be examined as to the sensitivity of natural and fishing mortality rates on yield and spawning potential. The present yield per recruit (YPR) analysis is based on several assumptions. A fish is assumed to consistently recruit to any given fishery at a given age; that is, selectivity by age does not change over time. Partial recruitment of fish is estimated from the relative abundance of age 1 through age 4 fish in the TIP samples compared to age 5 and over fish, which are fully recruited. Once the fish are fully recruited to the fishery, fishing pressure is assumed to be at a constant rate. The present YPR analysis does not take into account any variation in growth rate or

other factors which may affect the results. Use of YPR analysis requires:

- 1) information on natural and fishing mortality rates,
- 2) knowledge of the growth parameters of the fish.

Methods used for estimation of natural mortality (M) and fishing mortality (F) rates in this analysis are presented in Sections 5.2 and 5.3 above. The existing mullet fishery is mainly a roe fishery, targeting female fish (Thompson, 1989). Therefore, we have used the growth parameters for female mullet to calculate yield per recruit.

The results of this analysis are presented in Table 5.4, which contains estimates of  $F_{MAX}$  (fishing mortality rate that produces maximum yield),  $F_{0.1}$  (fishing mortality rate representing 10% of the slope at the origin of a yield-per-recruit curve),  $F_{20\%SPR}$  (fishing mortality that produces 20% SPR),  $F_{30\%SPR}$  (fishing mortality that produces 30% SPR), and annual estimates of F from the disappearance rates calculated in Section 5.3. Selectivities patterns of the fishery are recalculated with each additional year of data. Therefore, the results of this analysis, reflected in Table 5.4, could change each year depending on any change in selectivity patterns in the fishery.

### **5.5 Conservation Standard**

Conservation standards are based on one of a number of biological measures of the dynamics of fish stocks, that are intended to protect the viability of that stock for future generations. These standards have historically been based on different measures of the dynamics of fish stocks, depending on the data available, the needs of fishery and of the resource. Conservation standards should be separated into two types: a conservation threshold which is entirely biologically based, and a conservation target which considers biological measures modified by relevant social, economic, and ecological factors.

Conservation "thresholds" are intended to provide a biological baseline for harvest of a fish stock based on stock recruit relationships, or other biological parameters specific to the stock, if possible. This baseline standard, below which the stock should not be allowed to go, has been described as a "threshold" by some researchers, and has also been referred to as an "overfishing level" (GMFMC 1995). Beyond this "threshold", management "targets" may be set, which provide for other management goals in the fishery. Such goals may be in terms of yield in weight, yield in numbers of fish, catch rate per effort, harvest rate per effort, employment, profit, or some other goal. These targets must be set at a fishing rate below the "threshold" in order to ensure that the biological integrity of the stock is not unduly compromised by fishing.

Recently, use of a stock measure, spawning stock biomass per recruit (SSBR) or spawning potential ratio (SPR) has become widely used. This measure compares the estimated female spawning biomass of the stock that survive fishing with the estimated biomass of the stock under unfished conditions. The analysis does not take into account any density-dependent relationships due to the changes in the size of the fished stock. Using the Spawning Potential Ratio (SPR) concept as developed by Gabriel et al. (1984) and refined by Goodyear (1991), a "threshold" value can be



defined that provides a minimum spawning stock biomass (or egg production) per recruit, below which existing data cannot evaluate impacts to future recruitment, and below which the fishery should not be allowed to operate.

Ideally, "threshold" levels should be evaluated from information on the stock in question. However, the information base necessary to adequately describe this level is often not available. In such cases, it has been recommended by Goodyear (1989) that a spawning stock biomass per recruit (SSBR) or SPR of 20% be used as a "threshold" in absence of sufficient evidence to provide a standard specific to the stock in question. This standard is also based on work on North Atlantic groundfisheries (Gabriel et al. 1984, Gabriel, 1985). A SSBR of 35% has been recommended for Spanish mackerel, and 20% for king mackerel (GMFMC 1990, 1995). A SSBR of 8-13% has been demonstrated to be sufficient for Gulf menhaden (Vaughan 1987). In prior analyses of the Louisiana spotted seatrout fisheries (LDWF 1991), we recommended an SPR of 15% after analysis of several years of available data. Mace and Sissenwine (1993) examined 90 stocks of 27 species, and recommended that 30% SPR be maintained when there is no other basis for estimating the replacement level. That level is sufficient for 80% of the stocks considered by those authors. They also noted that 30% may be overly conservative for an "average" stock. The average replacement %SPR for the stocks they considered was 18.7% while the most resilient quarter of the stocks considered required a maximum F<sub>RE</sub>P of 8.6% SPR. Three-quarters of the stocks required a maximum F<sub>RE</sub>P of 27.1% SPR. In a prior assessment of striped mullet (Shepard et al., 1992), a SPR of 20% was recommended as the conservation standard for the Louisiana fishery. This standard was considered, rather than 30% SPR, due to several factors: the fishery is mainly prosecuted on the stocks of mullet east of the Mississippi River, and the estimate of SPR is based on only the fished stocks. The relatively unfished stocks to the west of the Mississippi River are only minimally considered in the assessment, with the result that the SPR ratios are underestimated.

Sufficient information is not available to directly estimate a conservation threshold for striped mullet in Louisiana. However, the conservation target of 30% SPR established by Act 1316 of the 1995 Regular Session of the Louisiana Legislature for black drum sheepshead, southern flounder and striped mullet appear to be adequate to maintain the striped mullet stock and prevent recruitment overfishing.

The use of any measure of health of a fish stock as a perfect index is arguable. Intuitively it seems more logical that growth overfishing would occur at a much lower fishing rate than would threaten recruitment. However, Mace and Sissenwine (1993) provide information to suggest that some stocks may have reduced levels of recruitment at levels of fishing that would not reduce yield per recruit. The preferable position for making recommendations on appropriate levels of fishing for a stock is to base those recommendations on actual measures of spawning stock and recruitment for that species, in the same fishery. This requires a base of information on that fishery that requires monitoring of both the stock and the fishery over a variety of conditions. Without this information, inappropriate conservation standards may either underestimate or overestimate the potential of the fishery. If the potential is underestimated, the society loses the economic and social benefits of the harvest. If the potential is overestimated, the society also loses the benefits of a sustainable fishery, which must at least go through some period of rebuilding, when effort must be reduced from the

non-sustainable levels (Hilborn and Walters, 1993).

### 5.6 Status of the Stock

The trends in harvest for striped mullet in the Louisiana fishery have been reviewed by Mapes *et al.* (1998). Commercial landings prior to 1991 was obtained from NMFS's General Canvass Landing Program, from 1991 through 1998 landings was collected through the LDWF's Monthly Dealer Reports and from 1999 to present LDWF's Commercial Reporting Requirement "Trip Tickets" program is utilized to gather this type of data. Recreational landings was obtained through the NMFS's Marine Recreational Fishery Statistics Survey. Harvest increased in the early 1990's, as the commercial roe fishery continued to develop (Figure 5.1). Harvest declined after 1995 as a direct result of regulations implemented August, 1995 eliminating the harvest of mullet outside of the period between the third Monday in October through the middle of the following January. Regulations also outlawed fishing for mullet at night, on weekends, in freshwater areas, and using gear other than strike gill nets. Legislation allowing the use of hoop nets in freshwater areas for taking mullet was legalized in 1999. The law required that no leads be used on the hoop nets, no harvest or possession of mullet from between the hours of official sunset and official sunrise, and mullet caught in the freshwater areas of the state could not be possessed by commercial fishermen in the saltwater areas of the state. Three legislative acts were passed in 2001: Act 51 defined certain portion of the Intracoastal waterway, from the overhead power lines at the Interharbor Navigation Canal east to the Rigolets, in Orleans Parish as saltwater and freshwater for the purposes of possessing regulated gear and allows the harvest of mullet in that area in addition to a portion of Lake Pontchartrain located south and east of the I-10 bridge as long as commercial fishing operations in these waters will not interfere with normal commercial traffic; Act 116 statutorily created a mullet task force to advise LDWF on certain issues; and Act 147 adopted a three-strikes and you are out penalty system within the commercial mullet fishery: first conviction, one year permit suspension, second conviction two years suspension, third conviction lifetime permit ban.

Annual recruitment of mullet has been evaluated from fishery-independent seine and experimental gill net samples taken statewide since 1986. Catch/effort information are compiled for January through May of each year, and the abundance is measured as  $\ln(\text{catch/effort})+1$ . Seine catches of fish larger than young-of-the-year ( $>70$  mm) are removed from the calculation of abundance indices (Figure 5.2). Gill net data from 2", 2.5", and 3" (5.08, 6.35, and 7.62 cm.) stretch mesh panels are used to provide relative abundance indices of mullet prior to harvest by legal saltwater commercial gears (Figures 5.3A-D).

Seine CPUE indices show higher mean catches of young-of-the-year (YOY) from 1996 through 2001 of the seventeen years examined (1987-2003) but the 2002 and 2003 CPUE are consistent with levels prior to 1996. There appears to be no long term downward trend in YOY indices for the years examined. Gill net CPUE indices seem to cycle throughout the period examined with relatively lower mean estimates of CPUE after 1998 (Figure 5.4D). There is some question however, after reviewing the relatively consistent annual pattern of different mesh sizes, whether the gill net samples actually measure relative abundance or simply measure annual availability to the sampling gear. One would expect to find more annual variation among mesh sizes

as fish grew and became increasingly available to the larger mesh size. The three mesh sizes, standardized to their mean, are presented in figure 5.4D. There does seem to be an annual pattern found between the mesh sizes with the last five years being relatively lower than previous years.

The results of YPR analysis indicate that if  $M=0.3$  (the most conservative value within the range of estimates), the current fishery is operating above  $F_{0.1}$  and  $F_{MAX}$  with yield of 97 to 99% of maximum, and SPR at 31% to 38%. An  $M$  of 0.6 would indicate a more lightly fished stock with yield being 67% to 88% of maximum and with SPR being 62% to 74%.

In all of these analyses, assumptions listed in prior sections of this report have a strong influence in the results. If  $M$  is actually near or above the upper end of the range considered here then increases in yield per recruit would be possible, and SPR would be above the minimum estimated values. Estimates of potential yield presented here do not account at all for potential extension of the fishery into areas of the state that do not now have a significant fishery. Any substantive change in geographic distribution of the fishery could substantially change the overall harvest levels.

Based on this generalized assessment, for all natural mortality rates examined, if fishing mortality rates continue at the current levels, then striped mullet are not being harvested at a rate that would drive the stock below the target SPR of 30% established by the Louisiana Legislature.

## **5.7 Research and Data Needs**

As with any analysis, the accuracy of the assessment is dependent on the accuracy of the information on which it is based. The present analyses, along with the biological data presented by Mapes *et al.* (1998) identify several areas for research to address.

Estimates of natural mortality used in the present assessment are derived from general literature sources, and show wide variation. This variation reduces the potential of the present assessment to provide a precise prediction of the yield potential of the stock, and also reduces the confidence level of the present estimate of SPR. A more precise estimate of natural mortality, based on Louisiana data, would assist in both of these problems.

Definition of sub-populations based on migratory patterns would help define exploitation rates within different areas of the state. This may help managers develop area-specific management to optimize yield from a given stock, while protecting the stock from over-harvest.

Recruitment mechanisms are poorly defined for the species. Mullet are suspected to spawn beyond the shelf break in the central Gulf of Mexico. No genetically distinct stocks have been identified within the Gulf. However, lack of genetic distinctness does not necessarily mean that stocks are homogeneously mixed by spawning and recruitment mechanisms, only that populations are not so removed from each other that gene structure is identifiably different. Better understanding of recruitment mechanisms, merged with measurement of oceanographic or other driving forces

could help in understanding the sub-genetic distinctiveness of mullet populations from different regions of the state of the Gulf of Mexico.

Factors that influence the year-class strength of mullet are essentially unknown. Investigation of these factors could help better define causes of inter-annual variation in abundance, and perhaps also the underlying stock-recruit relationships in the species.

The relationship between wetlands losses or modifications and the continuation of fishery production within the state has been discussed by many authors. However, this relationship is likely to be different for any of a suite of different species. Understanding of this relationship for mullet should be an ongoing priority.

In the presence of changing regulations, fishery-dependent information is not a reliable source of the data necessary to assess the status of a fish stock. However, such data is necessary to measure the effects of fishing on that stock. Consistent fishery-dependent and fishery-independent data sources, in a comprehensive monitoring plan, are essential to understanding the status of fishery stocks, and to identifying causes of changes in stock abundance. Present programs should be assessed for adequacy with respect to their ability to evaluate stock status, and modified or enhanced to optimize their capabilities.

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**Table 5.1.** Annual commercial and recreational harvest of mullet from Louisiana waters, expressed in pounds. Commercial harvest values from dealer landings reports, recreational harvest from NMFS MRFSS estimates of fish landed plus those discarded dead.

| Year | Commercial<br>Harvest<br>(lbs.) | Recreational<br>Harvest<br>(lbs.) | Total Harvest<br>(lbs.) | %<br>Commercial |
|------|---------------------------------|-----------------------------------|-------------------------|-----------------|
| 1981 | 3,051,461                       | 564                               | 3,052,025               | 99.98%          |
| 1982 | 1,533,452                       | 16,546                            | 1,549,998               | 98.93%          |
| 1983 | 1,886,654                       | 0                                 | 1,886,654               | 100.00%         |
| 1984 | 3,157,215                       | 2,793                             | 3,160,008               | 99.91%          |
| 1985 | 579,297                         | 7,504                             | 586,801                 | 98.72%          |
| 1986 | 2,277,713                       | 52,921                            | 2,330,634               | 97.73%          |
| 1987 | 1,439,425                       | 0                                 | 1,439,425               | 100.00%         |
| 1988 | 2,367,106                       | 105,876                           | 2,472,982               | 95.72%          |
| 1989 | 2,413,768                       | 75,287                            | 2,489,055               | 96.98%          |
| 1990 | 2,645,927                       | 296,111                           | 2,942,038               | 89.94%          |
| 1991 | 3,563,137                       | 26,303                            | 3,589,440               | 99.27%          |
| 1992 | 6,214,532                       | 121,273                           | 6,335,805               | 98.09%          |
| 1993 | 11,026,497                      | 185,012                           | 11,211,509              | 98.35%          |
| 1994 | 12,560,261                      | 97,509                            | 12,657,770              | 99.23%          |
| 1995 | 14,545,610                      | 89,626                            | 14,635,236              | 99.39%          |
| 1996 | 8,658,881                       | 216,838                           | 8,875,719               | 97.56%          |
| 1997 | 8,083,201                       | 129,917                           | 8,213,118               | 98.42%          |
| 1998 | 6,252,317                       | 15,459                            | 6,267,776               | 99.75%          |
| 1999 | 8,954,299                       | 48,766                            | 9,003,065               | 99.46%          |
| 2000 | 7,252,017                       | 88,202                            | 7,340,219               | 98.80%          |
| 2001 | 4,260,650                       | 115,618                           | 4,376,268               | 97.36%          |
| 2002 | 2,555,181                       | 58,901                            | 2,614,082               | 97.75%          |

Table 5.2 - Age-at-Length distribution of female striped mullet used in age-length key development.

| Length<br>(inches) | Age |     |      |      |     |     |    |    |   |    | Total |
|--------------------|-----|-----|------|------|-----|-----|----|----|---|----|-------|
|                    | 1   | 2   | 3    | 4    | 5   | 6   | 7  | 8  | 9 | 10 |       |
| 10                 | 18  | 67  | 7    | 1    |     |     | 1  |    |   |    | 94    |
| 11                 | 2   | 76  | 52   | 12   | 3   |     |    |    |   |    | 145   |
| 12                 | 9   | 105 | 153  | 87   | 18  | 5   | 1  |    |   |    | 378   |
| 13                 | 12  | 110 | 251  | 195  | 79  | 22  | 2  | 3  |   |    | 674   |
| 14                 | 12  | 74  | 200  | 225  | 131 | 34  | 9  | 3  |   |    | 688   |
| 15                 | 4   | 46  | 137  | 151  | 89  | 41  | 10 | 9  | 1 | 1  | 489   |
| 16                 | 1   | 49  | 116  | 122  | 67  | 26  | 8  | 1  | 1 |    | 391   |
| 17                 |     | 30  | 100  | 111  | 55  | 18  | 4  | 2  | 1 |    | 321   |
| 18                 | 1   | 6   | 47   | 71   | 34  | 11  | 5  | 1  | 1 |    | 177   |
| 19                 | 1   | 2   | 16   | 47   | 32  | 7   | 4  |    |   |    | 109   |
| 20                 |     | 1   | 3    | 15   | 23  | 14  | 6  |    |   |    | 62    |
| 21                 |     |     | 1    | 3    | 4   | 4   | 2  |    | 2 | 1  | 17    |
| 22                 |     |     |      | 2    | 3   | 4   | 5  | 1  |   |    | 15    |
| 23                 |     |     | 1    |      | 3   | 2   | 3  |    |   |    | 9     |
| 24                 |     |     |      |      | 5   | 3   | 3  |    |   |    | 11    |
| All                | 60  | 566 | 1084 | 1042 | 546 | 191 | 63 | 20 | 6 | 2  | 3580  |



Table 5.3 Regression Output from the Estimation of Disappearance Rates

**1994**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 18.5503   |
| Std Err of Y Est    | 0.4624425 |
| R Squared           | 0.9702872 |
| No. of Observations | 8         |
| Degrees of Freedom  | 6         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -0.99882  |
| Std Err of Coef. | 0.0713564 |

**1996**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 18.566267 |
| Std Err of Y Est    | 0.156     |
| R Squared           | 0.9959516 |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.033969 |
| Std Err of Coef. | 0.0294812 |

**1998**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 18.855665 |
| Std Err of Y Est    | 0.4101676 |
| R Squared           | 0.9778915 |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.152746 |
| Std Err of Coef. | 0.0775144 |

**2000**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 17.448049 |
| Std Err of Y Est    | 0.6605562 |
| R Squared           | 0.911813  |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -0.897566 |
| Std Err of Coef. | 0.1248334 |

**2002**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 17.317255 |
| Std Err of Y Est    | 0.5820545 |
| R Squared           | 0.9585603 |
| No. of Observations | 8         |
| Degrees of Freedom  | 6         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.058074 |
| Std Err of Coef. | 0.089813  |

**1995**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 19.224847 |
| Std Err of Y Est    | 0.2586424 |
| R Squared           | 0.989781  |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.07565  |
| Std Err of Coef. | 0.0488788 |

**1997**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 18.432739 |
| Std Err of Y Est    | 0.1661209 |
| R Squared           | 0.9953224 |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.024001 |
| Std Err of Coef. | 0.0313939 |

**1999**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 18.114605 |
| Std Err of Y Est    | 0.5090718 |
| R Squared           | 0.95371   |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -0.976449 |
| Std Err of Coef. | 0.0962055 |

**2001**

## Regression Output:

|                     |           |
|---------------------|-----------|
| Constant            | 19.668877 |
| Std Err of Y Est    | 0.4369422 |
| R Squared           | 0.9765425 |
| No. of Observations | 7         |
| Degrees of Freedom  | 5         |

|                  |           |
|------------------|-----------|
| X Coefficient(s) | -1.191336 |
| Std Err of Coef. | 0.0825743 |

Table 5.4 - Results of Yield per Recruit and SPR Analysis for Mullet

M=0.3

|         | F - Ratio | YPR     | SPR     | %SPR   | %YPR    |            |
|---------|-----------|---------|---------|--------|---------|------------|
| F-max = | 0.5850    | 85.6159 | 439,818 | 38.85% | 100.00% | Benchmarks |
| F0.1 =  | 0.3053    | 78.9245 | 601,324 | 53.11% | 92.18%  |            |
| F20% =  | 2.2571    | 68.5867 | 226,433 | 20.00% | 80.11%  |            |
| F30% =  | 0.9735    | 82.1891 | 339,650 | 30.00% | 96.00%  |            |
| 1997 =  | 0.7240    | 84.9626 | 394,645 | 34.86% | 99.24%  | Estimate   |
| 1998 =  | 0.8527    | 83.6619 | 363,137 | 32.07% | 97.72%  |            |
| 1999 =  | 0.6764    | 85.3078 | 408,540 | 36.08% | 99.64%  |            |
| 2000 =  | 0.5976    | 85.6091 | 435,118 | 38.43% | 99.99%  |            |
| 2001 =  | 0.8913    | 83.2078 | 355,092 | 31.36% | 97.19%  |            |
| 2002 =  | 0.7581    | 84.6615 | 385,510 | 34.05% | 98.89%  |            |

M=0.4

|         | F - Ratio | YPR     | SPR     | %SPR   | %YPR    |            |
|---------|-----------|---------|---------|--------|---------|------------|
| F-max = | 0.8101    | 50.0885 | 250,745 | 41.58% | 100.00% | Benchmarks |
| F0.1 =  | 0.3859    | 45.6088 | 339,417 | 56.29% | 91.06%  |            |
| F20% =  | 4.6013    | 39.3975 | 120,602 | 20.00% | 78.66%  |            |
| F30% =  | 1.7469    | 46.7168 | 180,903 | 30.00% | 93.27%  |            |
| 1997 =  | 0.6240    | 49.5523 | 279,996 | 46.43% | 98.93%  | Estimate   |
| 1998 =  | 0.7527    | 50.0475 | 258,704 | 42.90% | 99.92%  |            |
| 1999 =  | 0.5764    | 49.1670 | 289,377 | 47.99% | 98.16%  |            |
| 2000 =  | 0.4976    | 48.1690 | 307,309 | 50.96% | 96.17%  |            |
| 2001 =  | 0.7913    | 50.0844 | 253,262 | 42.00% | 99.99%  |            |
| 2002 =  | 0.6581    | 49.7514 | 273,826 | 45.41% | 99.33%  |            |

M=0.5

|         | F - Ratio | YPR     | SPR     | %SPR   | %YPR    |            |
|---------|-----------|---------|---------|--------|---------|------------|
| F-max = | 1.1278    | 30.6657 | 151,911 | 44.19% | 100.00% | Benchmarks |
| F0.1 =  | 0.4801    | 27.5558 | 205,191 | 59.69% | 89.86%  |            |
| F20% =  | 8.7085    | 24.2838 | 68,757  | 20.00% | 79.19%  |            |
| F30% =  | 3.1856    | 28.2872 | 103,136 | 30.00% | 92.24%  |            |
| 1997 =  | 0.5240    | 28.1728 | 199,371 | 57.99% | 91.87%  | Estimate   |
| 1998 =  | 0.6527    | 29.4285 | 184,977 | 53.81% | 95.97%  |            |
| 1999 =  | 0.4764    | 27.4983 | 205,706 | 59.84% | 89.67%  |            |
| 2000 =  | 0.3976    | 26.0199 | 217,807 | 63.36% | 84.85%  |            |
| 2001 =  | 0.6913    | 29.6840 | 181,294 | 52.73% | 96.80%  |            |
| 2002 =  | 0.5581    | 28.5771 | 195,203 | 56.78% | 93.19%  |            |

M=0.6

|         | F - Ratio | YPR     | SPR     | %SPR   | %YPR    |            |
|---------|-----------|---------|---------|--------|---------|------------|
| F-max = | 1.6698    | 19.5110 | 94,370  | 45.56% | 100.00% | Benchmarks |
| F0.1 =  | 0.5889    | 17.2172 | 130,425 | 62.97% | 88.24%  |            |
| F20% =  | 14.9721   | 15.6350 | 41,424  | 20.00% | 80.13%  |            |
| F30% =  | 5.5549    | 18.3016 | 62,137  | 30.00% | 93.80%  |            |
| 1997 =  | 0.4240    | 15.4430 | 142,500 | 68.80% | 79.15%  | Estimate   |
| 1998 =  | 0.5527    | 16.9091 | 132,766 | 64.10% | 86.66%  |            |
| 1999 =  | 0.3764    | 14.7098 | 146,779 | 70.87% | 75.39%  |            |
| 2000 =  | 0.2976    | 13.1726 | 154,948 | 74.81% | 67.51%  |            |
| 2001 =  | 0.5913    | 17.2367 | 130,273 | 62.90% | 88.34%  |            |
| 2002 =  | 0.4581    | 15.8970 | 139,682 | 67.44% | 81.48%  |            |

Figure 5.1 - Commercial Harvest of Mullet  
In Louisiana

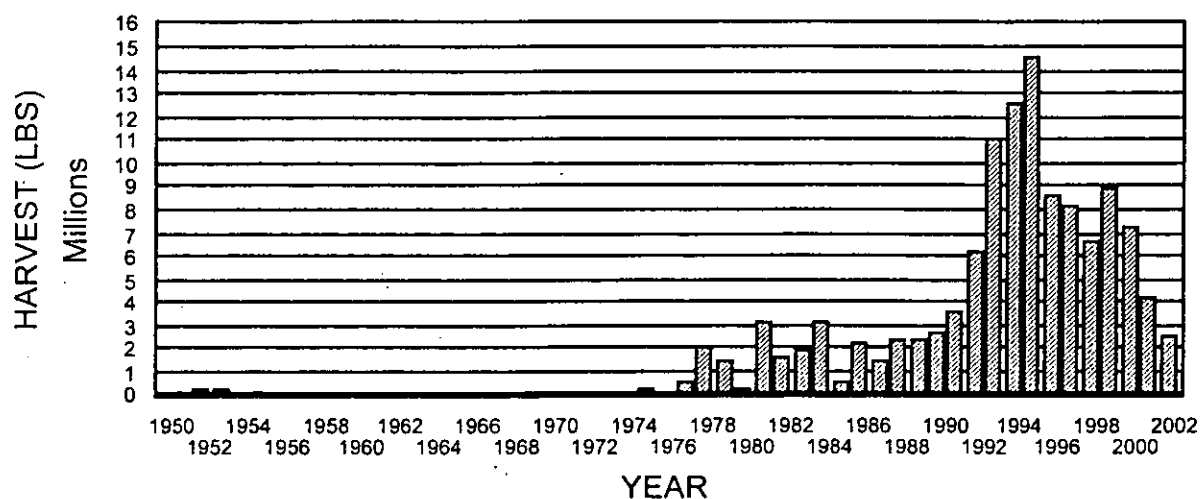


Figure 5.2 - Catch per Effort of Striped Mullet in Seines  
Marine Fisheries Division, Monitoring Program (January - May)

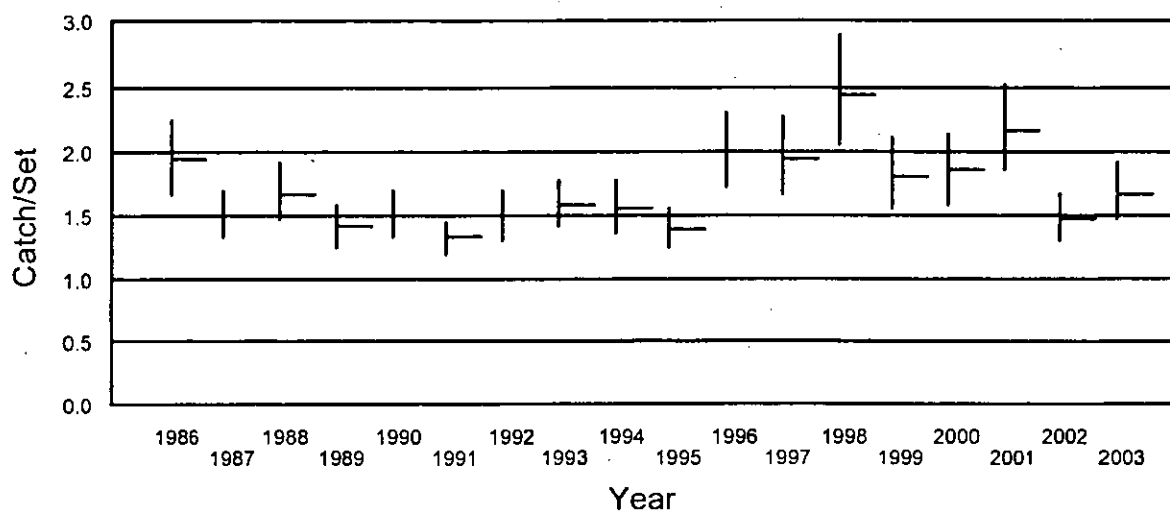


Figure 5.3A - Catch per Effort of Striped Mullet in 2" Stretch Gillnets  
Marine Fisheries Division, Monitoring Program

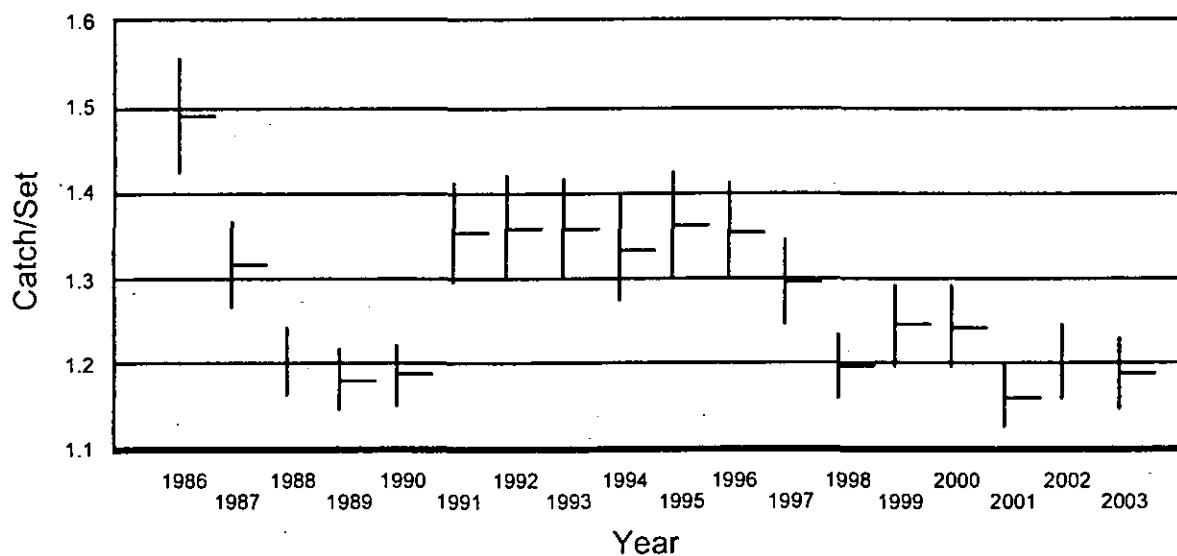


Figure 5.3B - Catch per Effort of Striped Mullet in 2.5" Stretch Gillnets  
Marine Fisheries Division, Monitoring Program

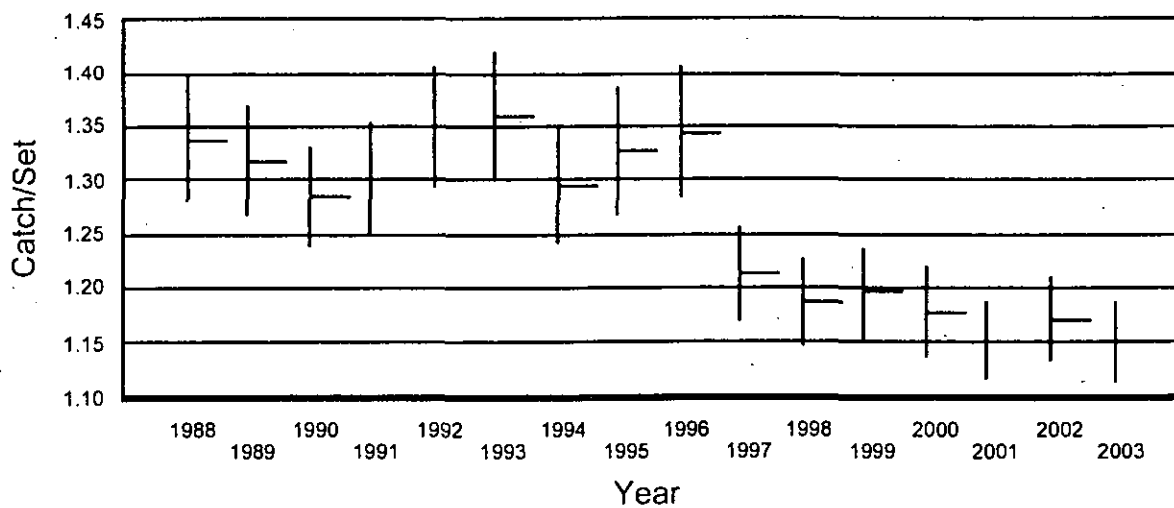


Figure 5.3C - Catch per Effort of Striped Mullet in 3" Stretch Gillnets  
Marine Fisheries Division, Monitoring Program

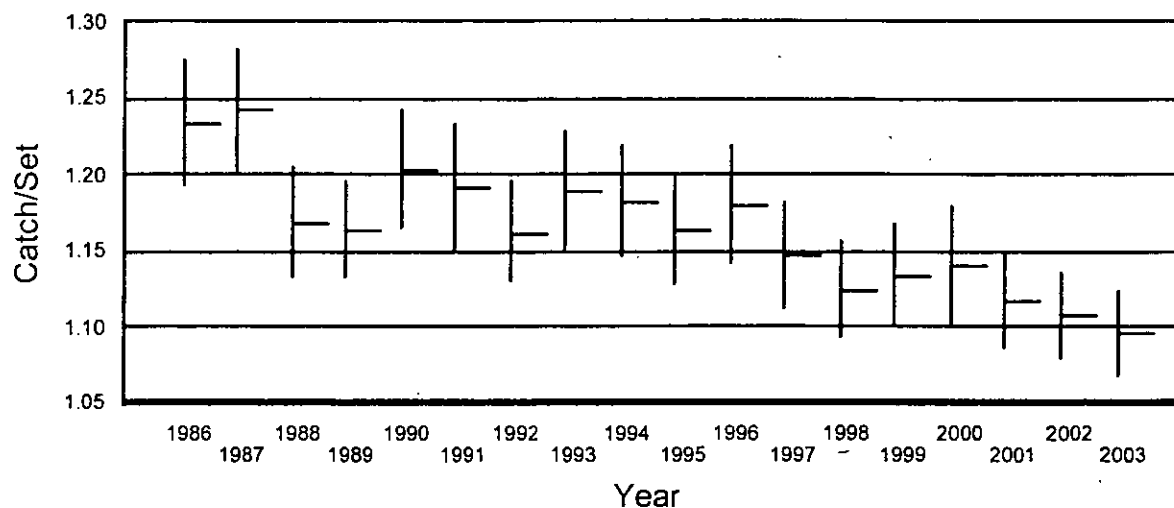
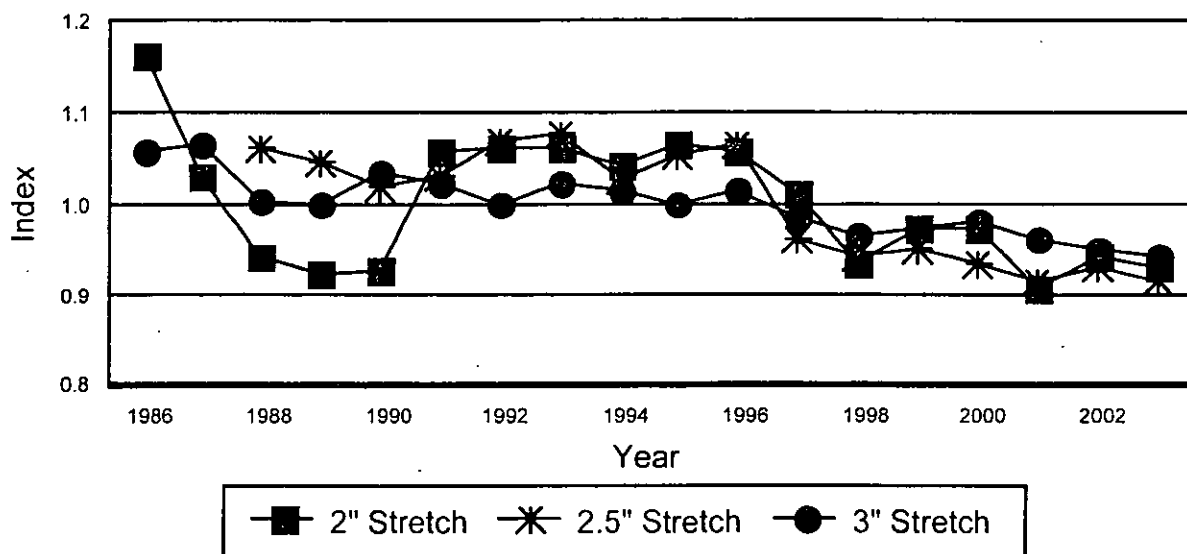


Figure 5.3D - Standardized CPUE of Striped Mullet in Gillnets  
Marine Fisheries Division, Monitoring Program



## SOUTHERN FLOUNDER SUMMARY OF CHANGES FROM 2003 ASSESSMENT

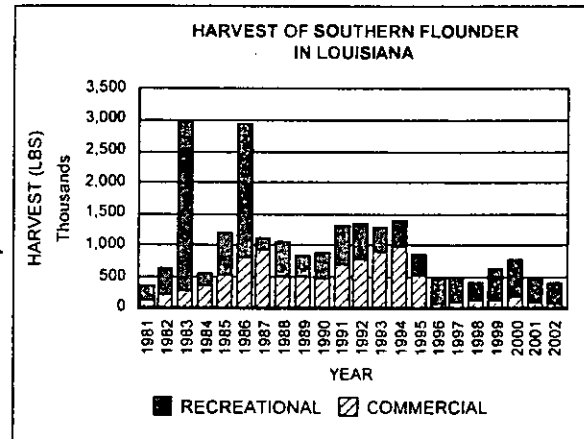
This summary is intended to provide a quick reference of substantive changes in methods or corrections in this year's assessment from the 2003 assessment conducted for southern flounder.

- There are no substantive changes in methods from the 2003 assessment.

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### 2004 DOCUMENT HIGHLIGHTS

- The 2002 combined commercial and recreational harvest of 400,358 pounds was below all years from 1995 to 2002. Regulations implemented between 1995 and 1997 have caused significant reductions in the commercial harvest.
- The results of YPR analysis indicate that if  $M=0.5$  (the most conservative value within the range of estimates), the fishery in the years assessed (1997 - 2002) was operating between  $F_{0.1}$  and  $F_{MAX}$ , with yields of 93% to 95% of maximum and SPR at 27% to 29%. An  $M$  of 0.8 (the highest value within the range examined) would produce yields of 57% to 60% of maximum with SPR at 50% to 54%.
- It should be noted that the method used in this assessment to determine the status of the stock, reflected in the estimates of disappearance, is not immediately sensitive to changes in regulations. Southern flounder enter the fishery at age 0 and are fully recruited by age 2. It takes several years of consistent regulations after regulations are imposed before the impact of those regulations can be measured. In the case of southern flounder it would take 3 years of consistent regulations assuming selectivities of age 2 and older is 100%.
- As a result of having several years of commercial trip ticket data, and collecting recreational fishery statistics data, the department was able to begin a program to representatively sample fishery dependent otoliths in 2002. The program uses trip ticket data and recreational survey data to weight sampling sites for the collection of otoliths for the species of interest. It is expected that this method of otolith sampling will improve stock assessments by providing more accurate annual catch-at-age data.



## SOUTHERN FLOUNDER

### 5.0 STOCK ASSESSMENT

This assessment uses yield-per-recruit (YPR), Spawning Potential Ratio (SPR) and catch curve analyses to estimate the impact of fishing pressure on potential yield and the spawning potential of the southern flounder stock in Louisiana waters. Estimates derived from YPR and SPR are based on information regarding the growth rate and spawning potential of the fish, and on estimates of the natural mortality rate (M) and fishing mortality rate (F) on the stock. Catch-curve analysis estimates disappearance rates (Z') from the fishery based on the relative abundance of each age class in the harvest. The results from this assessment provide a generalized approach towards estimating the impact of fishing on the spawning potential and potential yield of the fish stock. The spawning biomass of females is assumed to be the factor limiting the spawning potential of the stock; therefore, where possible, only data on female southern flounder are used. Yield-per-recruit and SPR analysis, as with many other generalized assessments, should be used only as a guide until a more comprehensive assessment can be conducted.

In developing a stock assessment, the unit stock must be defined. While a unit stock is often represented by that portion of the population which is genetically similar, for our purpose, the most applicable definition seems to be one which considers the unit stock as that portion of the population which is either dependent on Louisiana waters, or which is available to Louisiana fishermen.

#### 5.1 Growth

Von Bertalanffy growth parameters were calculated for female southern flounder in Louisiana by using aged samples collected by Thompson (B. Thompson, Coastal Fisheries Institute, Louisiana State University, unpublished data) combined with juveniles assigned to age 0 (< 100 mm total length) by length frequency analysis from Louisiana Department of Wildlife and Fisheries (LDWF) fishery-independent trawl samples. From the combined data, a three-parameter von Bertalanffy growth equation was estimated using nonlinear approximation (SAS, 1987). The equation is as follows:

$$\text{Female } L_t = 509(1 - e^{-0.8846(t-0.0954)})$$

where,  $L_t$  = length at age  $t$ . A plot of the data and predicted growth is provided in Figure 5.1. A length-weight regression for female southern flounder was derived using fish collected in Louisiana by Thompson (unpublished data) and the LDWF fishery-independent surveys. The resulting output of the SAS regression analysis is presented in Table 5.1. The length-weight regression used is as follows:

$$\log W = 3.18369 * \log L - 5.386116$$

where,  $W$  = body weight in grams, and  $L$  = total length in millimeters. A plot of the data and predicted weight-at-length is provided in Figure 5.2.

#### 5.2 Natural Mortality

Natural mortality is one part of total mortality (Z) and is the mortality due to all causes other than fishing. These include predation, disease, spawning stress, starvation, and old age. Typically, natural mortality is estimated as it is difficult to directly measure, especially on exploited fish stocks

where natural mortality and fishing mortality occur simultaneously. No direct measure of natural mortality for southern flounder is available; therefore, several established estimation procedures were used to derive an estimate. The procedures are presented below and are taken from Sparre and Venema (1992).

Pauly (1980) provides a method of estimating natural mortality from a set of parameters including the asymptotic length and growth rate of the fish, and the average water temperature of the environment. The growth parameters from the von Bertalanffy growth equation described in Section 5.1 and the mean annual water temperature, derived from readings from a set of four constant recorders located throughout the Barataria Bay system, were used in the calculation. The mean water temperature was 22.7°C for the period 1989 - 1992 (pers. comm., M. Kasprzak, 4/13/92). These values were incorporated into the length-based function of Pauly (1980):

$$\ln(M) = -0.0152 - 0.279 * \ln(L_{\infty}) + 0.6543 * \ln(K) + 0.463 * \ln(T).$$

where,  $\ln(M)$  = natural log of natural mortality,  $\ln(L_{\infty})$  = natural log of the asymptotic length,  $\ln(K)$  = natural log of the growth coefficient and  $\ln(T)$  = natural log of the mean annual temperature in degrees Celsius.

Use of Louisiana data on growth and water temperature applied to Pauly's function results in a natural mortality estimate of  $M=0.68$ .

Alagaraja (1984) and Hoenig (1983) provide methods of estimating  $M$  based on the fish's lifespan or longevity with the assumption that  $M=Z$ . Longevity is also difficult to determine for exploited fish stocks, since the age distribution is usually truncated by fishing, but these methods are as useful as any in providing provisional estimates of natural mortality. The functions described by Alagaraja (1984) are:

$$\begin{aligned} M1\% &= -\ln(0.01)/T_m \\ M0.1\% &= -\ln(0.001)/T_m \end{aligned}$$

where,  $M1\%$  and  $M0.1\%$  are the natural mortality rates corresponding to 99% and 99.9% mortality, respectively, given a fish's lifespan ( $T_m$ ) in years. Female southern flounder in Louisiana have been aged to 7-years-old (Thompson, personal communication). If it is assumed that 99% or 99.9% of the fish die by age 7 then corresponding natural mortality rates for  $M1\%$  and  $M0.1\%$  would be 0.66 and 0.99 respectively.

The function described by Hoenig(1983) is :

$$\ln(Z) = 1.46 - 1.01 * \ln(T_m)$$

where, when  $M=Z$ , longevity ( $T_m$ ) can be defined as the maximum survival age. If we assume that the maximum age of southern flounder has been truncated due to fishing from 9 to 7 years, the resulting estimate of natural mortality, given  $T_m=7$ , would be 0.60. However, if our assumption is incorrect and the maximum age is 9 years then the estimate of natural mortality would be 0.47.

Another method of estimating  $M$  is described by Rikhter and Efanov (1976) and utilizes population age at sexual maturity. The function is:

$$M = 1.521/(T_m 50\%^{0.720}) - 0.155$$



where,  $T_{m50\%}$  is the age at which 50% of the population is mature. Age 1 is assumed to be the age at 50% maturity, based on the length at sexual maturity found by several researchers (Adkins et al. 1996), and results in an  $M$  of 1.37. However, if 50% maturity occurs at age 2 rather than age 1, the estimate of natural mortality would be 0.77.

In summary, the estimated rates of natural mortality for southern flounder in Louisiana using a variety of estimation procedures are as follow:

|                           |               |
|---------------------------|---------------|
| Pauly (1980)              | 0.68          |
| Alagaraja (1984)          | 0.66 and 0.99 |
| Hoenig (1983)             |               |
| 1) Longevity 9 years      | 0.47          |
| 2) Longevity 7 years      | 0.60          |
| Rikhter and Efanov (1976) |               |
| 1) 50% maturity age 1     | 1.37          |
| 2) 50% maturity age 2     | 0.77          |

### **5.3 Disappearance Rates and Fishing Mortality**

The disappearance rate ( $Z'$ ) from the fishery comprises total mortality (natural + fishing) and some unknown rate of decreasing availability of the fish to the fishery. If the unknown rate of availability is small or nonexistent, then the disappearance rate will be a reasonable estimate of total mortality. However, if a large portion of the disappearance rate is due to fish not being available to the fishery, then assuming  $Z'=Z$  will overestimate the impact of fishing.

An annual catch-at-age matrix was developed by applying a single age-length-key to the years where length frequency data for the commercial and recreational fishery was available (1994 - 2001). Length frequency data were obtained from the Trip Interview Program (TIP) for the commercial fishery, and from the National Marine Fisheries Service's (NMFS) Marine Recreational Fishery Statistics Survey (MRFSS) for the recreational fishery. The data from both of the surveys did not distinguish between sexes, therefore we assumed for this assessment that all fish sampled were female ( $n=2,641$ ). An age-length-key was developed from otolith aging of fish by Thompson (unpublished data) and LDWF's ongoing aging study. Twenty six hundred and forty one aged fish were used in the development of the age-length key (Table 5.2). To calculate disappearance rates, we regressed the natural log of the catch-at-age, beginning with the age at full recruitment to the fishery. This method assumes that recruitment is constant and the fishery is in equilibrium. A range of natural mortality rates were used in the assessment. After reviewing estimates of  $M$  in Section 5.2, we chose not to assume either method of estimating  $M$  was better than another, but rather to present results for the range of estimates. The range of  $M$  was from 0.47 - 1.37. We chose to use an  $M$  of 0.5 - 0.8 that encompass most of the estimates. Disappearance rates were calculated from the combined commercial and recreational catch-at-age data by year for 1994 - 2001. The calculated disappearance rates ranged from 1.27 to 1.33 (Table 5.3).

Catch-at-age from the fishery for the years 1994-2001 was used to derive age-specific selectivities to be used in yield-per-recruit analysis. The method presented in Sparre and Venema (1992) was used to develop selectivities. This method uses a linearized catch curve to determine

the selectivity of fish not yet fully recruited to the fishery. The ratio of the observed catches to the expected catches at each age is the probability of capture or selectivity of the fishery at age. Selectivities are then regressed in the equation:

$$\ln(1/S_t - 1) = T1 - T2 * t$$

where,  $S_t$  = the selectivity at age  $t$ , and  $T1$  and  $T2$  are constants corresponding to the intercept and slope of the regression. To develop theoretical or estimated selectivities at age the following equation is used:

$$S_t (\text{estimate}) = 1 / (1 + \exp(T1 - T2 * t))$$

Selectivities for ages up to full age-at-recruitment were used to describe the relative fishing mortality to that point; for age at full recruitment and older, selectivities are assumed to be 1, or 100% selected. Selectivities are as follows:

age 0 = 0.0166  
 age 1 = 0.8619  
 ages 2 and older = 1.

#### **5.4 Yield per Recruit**

Yield-per-recruit and SPR analysis provide basic information on fish stock dynamics by estimating the impact of mortality on yield and the spawning potential of the stock. The results can be examined as to the sensitivity of natural and fishing mortality rates on yield and spawning potential.

The growth parameters described in Section 5.1, sexual maturity described in Section 5.2 and the age-specific selectivities described in Section 5.3 were incorporated into the yield-per-recruit and spawning potential analysis. Fecundity estimates were not available, therefore; mean weight at age was used in the estimation of spawning potential. Natural mortality rates of 0.5 to 0.8 by 0.1 were used in the analysis because they are on the lower end of the range of estimates and would provide the most conservative results. These rates are also used to describe the sensitivity of  $M$  on yield and spawning potential. The results are presented in Table 5.4, which contains estimates of  $F_{MAX}$  (fishing mortality rate that produces maximum yield),  $F_{0.1}$  (fishing mortality rate representing 10% of the slope at the origin of a yield-per-recruit curve),  $F_{20\%SPR}$  (fishing mortality that produces 20% SPR),  $F_{30\%SPR}$  (fishing mortality that produces 30% SPR), and annual estimates of  $F$  from the disappearance rates calculated in Section 5.3. Selectivities patterns of the fishery are recalculated with each additional year of data. Therefore, the results of this analysis, reflected in Table 5.4, could change each year depending on any change in selectivity patterns in the fishery.

#### **5.5 Conservation Standards**

Conservation standards are intended to protect the viability of a fish stock for future generations. These standards have historically been based on a number of biological measures of the dynamics of fish stocks, depending on the availability and adequacy of data. Conservation standards should be separated into two types: a conservation threshold which is entirely biologically based and, a conservation target which considers biological measures modified by relevant social, economic, and ecological factors. A conservation threshold is a biological baseline for the harvest

of a fish stock and should not be exceeded. It is the highest level of fishing mortality that will ensure that recruitment overfishing will not occur. Beyond the conservation threshold, a conservation target may be set, providing for other management goals in the fishery. Such goals may include maximizing yield in weight or numbers of fish, economic benefits or profit, employment, or some other measurable goal. These targets should be set at a fishing mortality rate below that of the conservation threshold in order to ensure that the biological integrity of the stock is not damaged by fishing.

The spawning potential ratio (SPR) concept described by Goodyear (1989), is a species specific value expressed as the ratio of the spawning stock biomass (or egg production) per recruit (SSB/R) in a fished condition to the SSB/R in an unfished condition. The concept is based on the premise that below some level of SPR, recruitment will be reduced. Goodyear (1989), recommends that in the absence of sufficient data to provide a value specific to the stock in question an SPR of 20% be used as a threshold. Work on North Atlantic ground fisheries also resulted in the calculation of a threshold SPR of 20% (Gabriel et al. 1984, Gabriel 1985). An SPR of 20% has been recommended for Spanish and king mackerel in the Gulf of Mexico (National Oceanic and Atmospheric Administration/National Marine Fisheries Service 1995), while an SPR of 8-13% has been demonstrated to be sufficient for gulf menhaden (Vaughan 1987). In earlier analyses of Louisiana spotted seatrout fisheries (Louisiana Department of Wildlife and Fisheries 1991), an SPR threshold of 15% was recommended based on several years of data. Mace and Sissenwine (1993) examined 90 stocks of 27 species, and reported that the average replacement SPR for all these stocks was 18.7%, while the most resilient quarter of the stocks required a maximum of only 8.6%. These authors recommended that an SPR of 30% be maintained when there is no other basis for estimating the replacement level, as this level was sufficient in maintaining recruitment for 80% of the stocks examined. However, they noted that 30% may be overly conservative for an "average" stock, and reiterated the need for stock-specific evaluations of standards to enhance both safety and benefits in the fishery.

Sufficient information is not available to directly estimate a conservation threshold for southern flounder in Louisiana. However, the conservation target of 30% SPR established by the 1995 Regular Session of the Louisiana Legislature for black drum, southern flounder, sheepshead, and striped mullet appears to be adequate to maintain the southern flounder stock and prevent recruitment overfishing.

The use of any measure of the health of a fish stock as a perfect index is arguable. It is logical to conclude that growth overfishing should occur at a much lower fishing rate than that which would threaten recruitment. However, Mace and Sissenwine (1993) provide information to suggest that some stocks may have reduced recruitment at levels of fishing that would not reduce yield-per-recruit. The preferable position for making recommendations on appropriate levels of fishing for a stock is to base those recommendations on actual measures of spawning stock size and recruitment for both the species and fishery in question. This requires a base of information resulting from monitoring of both the stock and the fishery over a variety of conditions. Without this information, conservation standards may either underestimate or overestimate the potential of a fishery. If the potential is underestimated, society loses the economic and social benefits of the harvest. If the potential is overestimated and the fishery is allowed to operate beyond sustainable levels, society loses the benefits of a sustainable fishery, and recovery will require some period of rebuilding, when effort must be reduced from the non-sustainable levels (Hilborn and Walters, 1993).

## **5.6 Status of the Stock**

Rules for the harvest of southern flounder have changed substantially from 1995 through 1999. Commercial harvest methods were changed on August 15, 1995 when Act 1316 of the 1995 Regular Legislative Session, the Marine Resources Conservation Act of 1995, became effective. This act outlawed the use of "set" gill nets or trammel nets in saltwater areas of Louisiana, and restricted flounder harvest by the use of "strike" nets to the period between the third Monday in October and March 1 of the following year. A "Restricted Species Permit" was required in order to harvest flounder, and several criteria were established in order to qualify for that permit. After March 1, 1997, all harvest by gill or trammel nets was banned, and commercial harvesters must utilized other legal commercial gear to harvest flounder. This set of regulations had the effect of substantially reducing the harvest of flounder by this segment of the commercial fishing industry.

A second set of regulations became effective on May 1, 1996. Recreational harvesters were restricted to a creel limit of ten (10) southern flounder, with one day's limit in possession. At the same time, the use of strike nets for the harvest of southern flounder was outlawed, and other commercial harvesters were limited to a possession limit of ten (10) fish per person aboard a commercial vessel. This set of regulations reduced the ability of some recreational harvesters to retain southern flounder, and also reduced the harvest potential of the commercial fishing industry.

In 1997, regulations were changed by Acts 1163 and 1352 of the 1997 Regular Legislative Session. Recreational and commercial harvesters continued to have daily take limit of 10 fish, but were allowed that take limit for each day on the water. Additionally, commercial shrimping vessels are limited to 100 pounds of southern flounder per shrimping trip.

In 1999, regulations were changed by Acts 220 of the 1999 Regular Legislative Session. The act eliminated the 100 pound harvest limit on commercial shrimping when southern flounder are harvested as by-catch. The Act became effective in August of 1999.

Commercial landings have fluctuated over the period 1950-2001 with the highest landings in the mid-1980s and mid-1990s at 0.94 and 0.97 million pounds, respectively (Figure 5.3). Regulatory measures implemented in 1995, 1996 and 1997 had much to do with the reduction in commercial harvest from 1996 to present. Recreational landings were equal to or greater than those of the commercial fishery until 1991 when the commercial fishery began harvesting a greater percentage of the total harvest (Figure 5.4). As a result of the regulatory measures described above the recreational harvest was greater than the commercial harvest in 1996 - 2002. Fishery dependent commercial data prior to 1991 was obtained from NMFS's General Canvass Landing Program, from 1991 through 1998 it was collected by the LDWF's Monthly Dealer Reports and from 1999 to present LDWF's Commercial Reporting Requirement "Trip Tickets" program is utilized to gather this type of data.

Harvest from the recreational fishery has fluctuated for the years examined (1981-2002), and has been relatively stable since 1988. Mean catch-per-trip from the recreational fishery was calculated by selecting those trips that had southern flounder in the catch. The means with 95% confidence limits are presented in Figure 5.5. The catch-per-effort (CPUE) indices seem to cycle over the years examined, with 2001 having the lowest mean CPUE. From a high in 1990 through 2002 CPUE has shown a declining trend. Fisheries dependent recreational landings data is collected through the NMFS's MRFSS survey and currently collected by LDWF Biologists.

Catch-per-effort data from the Department's, fishery-independent trammel net (750' x 6' - 1 5/8" inner, 6" outer wall) and 16-foot flat otter trawl samples were calculated as follows:

$$\text{Mean CPUE} = ( \exp ( \sum \ln ( \text{catch} + 1 ) / N ) ) - 1$$

where, catch is the total number caught in each set and, N is the number of samples taken annually. Trammel net data were used for the period 1986-2003, and 16-foot trawl data were used for the period 1967-2003. Trammel net samples are collected from October through March. In order to use the most recent data available to us in this report, trammel net CPUE was estimated for two periods (January-March and October-December). This allowed the use of 2003 data through December. CPUE estimates from trammel nets fluctuated throughout the period examined with 2003's January-March and October-December estimate being relatively stable over the past eight years (Figure 5.6A-B). The large amount of variation in January - March samples for 1987 is due to small sample size (Figure 5.6A). Standardized CPUE estimates presented in Figure 5.6C indicate better than average catches in the latter half of the years examined; however, over the past four years CPUE has been below average. Trawl data were used to provide an index of young-of-the-year recruitment. The long-term database provide by 16-foot trawl data shows how CPUE cycles over time and represents natural fluctuations in recruitment. Whatever the cause of the cyclic nature of the indices, no evidence from the 16-foot trawl data indicates a long-term downward trend in CPUE for southern flounder (Figure 5.7).

It should be noted that the following results of YPR and SPR analysis do not reflect the impact of current regulations described above. With this type of general assessment, it will take several years before the impact of regulations will be observed in the disappearance rates from the fishery.

The results of YPR analysis indicate that if  $M=0.5$  (the most conservative value within the range of estimates), the fishery in the years assessed (1997 - 2002) was operating between  $F_{0.1}$  and  $F_{MAX}$ , with yields of 93% to 95% of maximum and SPR at 27% to 29%. An  $M$  of 0.8 (the highest value within the range examined) would produce yields of 57% to 60% of maximum with SPR at 50% to 54% (Table 5.4).

## **5.7 Research and Data Needs**

Estimates of natural mortality used in the present assessment show wide variation. This variation reduces the reliability of the present assessment in providing an accurate prediction of the potential yield of the stock, and also reduces the confidence level of the present estimate of SPR. A more precise estimate of natural mortality would assist in both of these problems.

Annual sex specific age-length keys should continue to be developed to provide catch-at-age data necessary to conduct age-based population assessments. The department is in the process of collecting otoliths for development of annual age-length keys.

Sex specific fishery dependent length frequency data is essential in adequately partitioning catch from the fishery. In the case of flounder, males grow slower and do not get as large as females. There can be significant improvement in the accuracy of this assessment if sex is collected.

The relationship between wetlands losses or modifications and the continuation of fishery production within the state has been discussed by many authors. However, this relationship is likely to be different for the various fishery species. Understanding of this relationship for southern flounder should be an ongoing priority.

In the presence of changing regulations, fishery-dependent information is not a reliable source of data necessary to assess the status of a fish stock. However, such data is necessary to measure the effects of fishing on that stock. Consistent fishery-dependent and fishery-independent data sources, in a comprehensive monitoring plan, are essential to understanding the status of fishery stocks, and to identifying causes of changes in stock abundances. Present programs should be assessed for adequacy with respect to their ability to evaluate stock status, and modified or enhanced to optimize their capabilities.

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Table 5.1 - SAS output from length-weight regression analysis

The SAS System

Model: MODEL1

Dependent Variable: LOG\_W

#### Analysis of Variance

| Source   | DF  | Sum of Squares | Mean Square | F Value   | Prob>F |
|----------|-----|----------------|-------------|-----------|--------|
| Model    | 1   | 54.62048       | 54.62048    | 14726.405 | 0.0001 |
| Error    | 966 | 3.58291        | 0.00371     |           |        |
| C Total  | 967 | 58.20339       |             |           |        |
| Root MSE |     | 0.06090        | R-square    | 0.9384    |        |
| Dep Mean |     | 2.90704        | Adj R-sq    | 0.9384    |        |
| C.V.     |     | 2.09497        |             |           |        |

#### Parameter Estimates

| Variable | DF | Parameter Estimate | Standard Error | T for H0: Parameter=0 | Prob >  T |
|----------|----|--------------------|----------------|-----------------------|-----------|
| INTERCEP | 1  | -5.386116          | 0.06836746     | -78.782               | 0.0001    |
| LOG_L    | 1  | 3.183690           | 0.02623508     | 121.352               | 0.0001    |

Table 5.2 - Age-at-length distribution of fish used in age-length key development.

| Length<br>(inches) | AGE |      |     |     |    |   |   |   | Total |
|--------------------|-----|------|-----|-----|----|---|---|---|-------|
|                    | 0   | 1    | 2   | 3   | 4  | 5 | 6 | 7 |       |
| 6                  | 1   | 3    |     |     |    |   |   |   | 4     |
| 7                  | 16  | 9    | 1   |     |    |   |   |   | 26    |
| 8                  | 64  | 20   | 2   |     |    |   |   |   | 86    |
| 9                  | 93  | 85   | 5   |     |    |   |   |   | 183   |
| 10                 | 52  | 99   | 7   | 1   |    |   |   |   | 159   |
| 11                 | 38  | 174  | 27  | 3   |    |   | 1 |   | 243   |
| 12                 | 15  | 198  | 35  | 5   |    |   |   |   | 253   |
| 13                 | 12  | 163  | 39  | 5   |    |   |   |   | 219   |
| 14                 | 8   | 280  | 103 | 17  |    |   | 1 |   | 409   |
| 15                 | 2   | 180  | 79  | 13  | 1  |   |   |   | 275   |
| 16                 |     | 173  | 107 | 22  | 3  |   |   |   | 305   |
| 17                 | 1   | 82   | 61  | 22  | 3  |   |   |   | 169   |
| 18                 | 1   | 69   | 54  | 21  | 4  | 5 |   | 1 | 155   |
| 19                 | 1   | 20   | 22  | 2   | 5  | 1 |   |   | 51    |
| 20                 |     | 12   | 22  | 11  | 5  |   |   |   | 50    |
| 21                 | 1   | 4    | 9   | 5   | 4  |   |   |   | 23    |
| 22                 |     | 1    | 8   | 3   | 1  |   | 1 |   | 14    |
| 23                 |     |      | 2   | 3   | 2  | 1 | 1 |   | 9     |
| 24                 |     |      |     | 2   | 2  | 2 |   |   | 6     |
| 25                 |     |      |     | 1   |    |   |   |   | 1     |
| 26                 |     |      |     | 1   |    |   |   |   | 1     |
| Total              | 305 | 1572 | 583 | 137 | 30 | 9 | 4 | 1 | 2641  |

Table 5.3 Regression Output from the Estimation of Disappearance Rates

**1994**

Regression Output:  
Constant 14.915731  
Std Err of Y Est 0.2266308  
R Squared 0.9943758  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.273414  
Std Err of Coef. 0.0428292

**1996**

Regression Output:  
Constant 13.727194  
Std Err of Y Est 0.3056498  
R Squared 0.9906913  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.332462  
Std Err of Coef. 0.0577624

**1998**

Regression Output:  
Constant 13.657311  
Std Err of Y Est 0.2943606  
R Squared 0.9907404  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.286675  
Std Err of Coef. 0.0556289

**2000**

Regression Output:  
Constant 14.143179  
Std Err of Y Est 0.2304911  
R Squared 0.9942008  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.275302  
Std Err of Coef. 0.0435587

**2002**

Regression Output:  
Constant 13.675275  
Std Err of Y Est 0.3289649  
R Squared 0.9893629  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.340666  
Std Err of Coef. 0.0621685

**1995**

Regression Output:  
Constant 14.441602  
Std Err of Y Est 0.2408644  
R Squared 0.9937897  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.287563  
Std Err of Coef. 0.0455191

**1997**

Regression Output:  
Constant 13.807823  
Std Err of Y Est 0.3382599  
R Squared 0.9879663  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.295175  
Std Err of Coef. 0.0639251

**1999**

Regression Output:  
Constant 14.119579  
Std Err of Y Est 0.2702238  
R Squared 0.9927632  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.337456  
Std Err of Coef. 0.0510675

**2001**

Regression Output:  
Constant 13.748498  
Std Err of Y Est 0.33312  
R Squared 0.9884234  
No. of Observations 7  
Degrees of Freedom 5

X Coefficient(s) -1.300732  
Std Err of Coef. 0.0629538

Table 5.4 Results of Yield per Recruit and SPR Analysis for Southern Flounder

M=0.5

|         | F Ratio | YPR    | SPR    | %SPR   | %YPR    |            |
|---------|---------|--------|--------|--------|---------|------------|
| F-max = | 4.1654  | 0.6382 | 0.1708 | 6.21%  | 100.00% | Benchmarks |
| F0.1 =  | 0.5642  | 0.5586 | 1.0405 | 37.81% | 87.52%  |            |
| F30% =  | 0.7675  | 0.5978 | 0.8256 | 30.00% | 93.68%  |            |
| F20% =  | 1.2325  | 0.6298 | 0.5504 | 20.00% | 98.69%  |            |
| 1997 =  | 0.7952  | 0.6014 | 0.8024 | 29.16% | 93.91%  | Estimates  |
| 1998 =  | 0.7867  | 0.6003 | 0.8094 | 29.41% | 94.20%  |            |
| 1999 =  | 0.8375  | 0.6062 | 0.7693 | 27.96% | 95.03%  |            |
| 2000 =  | 0.7753  | 0.5989 | 0.8189 | 29.76% | 94.89%  |            |
| 2001 =  | 0.8007  | 0.6021 | 0.7979 | 29.00% | 93.95%  |            |
| 2002 =  | 0.8407  | 0.6066 | 0.7669 | 27.87% | 94.46%  |            |

M=0.6

|         | F Ratio | YPR    | SPR    | %SPR   | %YPR    |            |
|---------|---------|--------|--------|--------|---------|------------|
| F-max = | 7.4551  | 0.5865 | 0.0844 | 4.27%  | 100.00% | Benchmarks |
| F0.1 =  | 0.6831  | 0.4730 | 0.7310 | 36.98% | 80.65%  |            |
| F30% =  | 0.9064  | 0.5057 | 0.5931 | 30.00% | 86.22%  |            |
| F20% =  | 1.4754  | 0.5415 | 0.3954 | 20.00% | 92.33%  |            |
| 1997 =  | 0.6952  | 0.4753 | 0.7221 | 36.52% | 81.04%  | Estimates  |
| 1998 =  | 0.6867  | 0.4737 | 0.7283 | 36.84% | 80.77%  |            |
| 1999 =  | 0.7375  | 0.4828 | 0.6923 | 35.02% | 82.32%  |            |
| 2000 =  | 0.6753  | 0.4715 | 0.7369 | 37.27% | 80.40%  |            |
| 2001 =  | 0.7007  | 0.4764 | 0.7180 | 36.32% | 81.22%  |            |
| 2002 =  | 0.7407  | 0.4833 | 0.6901 | 34.91% | 82.41%  |            |

M=0.7

|         | F Ratio | YPR    | SPR    | %SPR   | %YPR    |            |
|---------|---------|--------|--------|--------|---------|------------|
| F-max = | 8.2995  | 0.5254 | 0.0674 | 4.62%  | 100.00% | Benchmarks |
| F0.1 =  | 0.8151  | 0.4064 | 0.5300 | 36.32% | 77.34%  |            |
| F30% =  | 1.0602  | 0.4338 | 0.4377 | 30.00% | 82.55%  |            |
| F20% =  | 1.7464  | 0.4708 | 0.2918 | 20.00% | 89.60%  |            |
| 1997 =  | 0.5952  | 0.3641 | 0.6579 | 45.09% | 69.79%  | Estimates  |
| 1998 =  | 0.5867  | 0.3642 | 0.6554 | 44.91% | 69.32%  |            |
| 1999 =  | 0.6375  | 0.3756 | 0.6230 | 42.70% | 71.49%  |            |
| 2000 =  | 0.5753  | 0.3615 | 0.6630 | 45.44% | 68.80%  |            |
| 2001 =  | 0.6007  | 0.3675 | 0.6461 | 44.28% | 69.95%  |            |
| 2002 =  | 0.6407  | 0.3763 | 0.6211 | 42.57% | 71.62%  |            |

M=0.8

|         | F Ratio | YPR    | SPR    | %SPR   | %YPR    |            |
|---------|---------|--------|--------|--------|---------|------------|
| F-max = | 9.0843  | 0.4715 | 0.0548 | 4.97%  | 100.00% | Benchmarks |
| F0.1 =  | 0.9650  | 0.3545 | 0.3930 | 35.66% | 75.19%  |            |
| F30% =  | 1.2277  | 0.3774 | 0.3306 | 30.00% | 80.04%  |            |
| F20% =  | 2.0439  | 0.4149 | 0.2204 | 20.00% | 88.00%  |            |
| 1997 =  | 0.4952  | 0.2742 | 0.5847 | 53.06% | 58.16%  | Estimates  |
| 1998 =  | 0.4867  | 0.2719 | 0.5897 | 53.51% | 57.67%  |            |
| 1999 =  | 0.5375  | 0.2851 | 0.5607 | 50.88% | 60.45%  |            |
| 2000 =  | 0.4753  | 0.2688 | 0.5966 | 54.14% | 57.00%  |            |
| 2001 =  | 0.5007  | 0.2757 | 0.5814 | 52.76% | 58.47%  |            |
| 2002 =  | 0.5407  | 0.2858 | 0.5590 | 50.72% | 60.62%  |            |

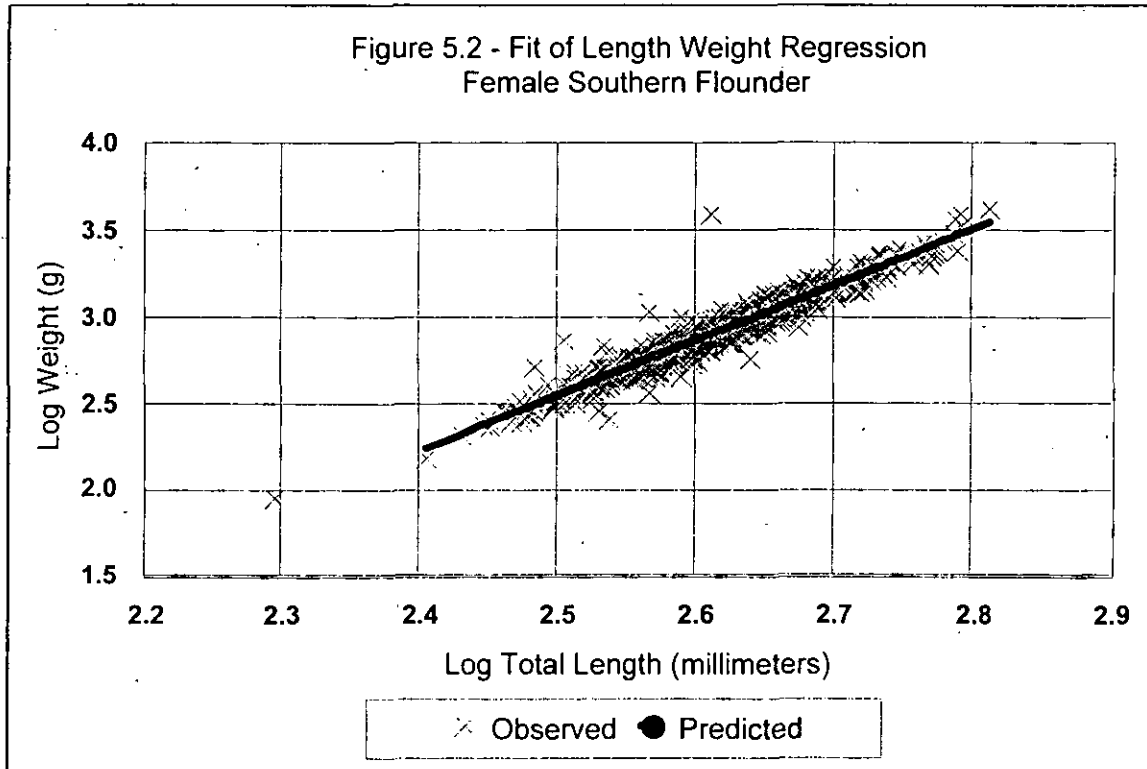
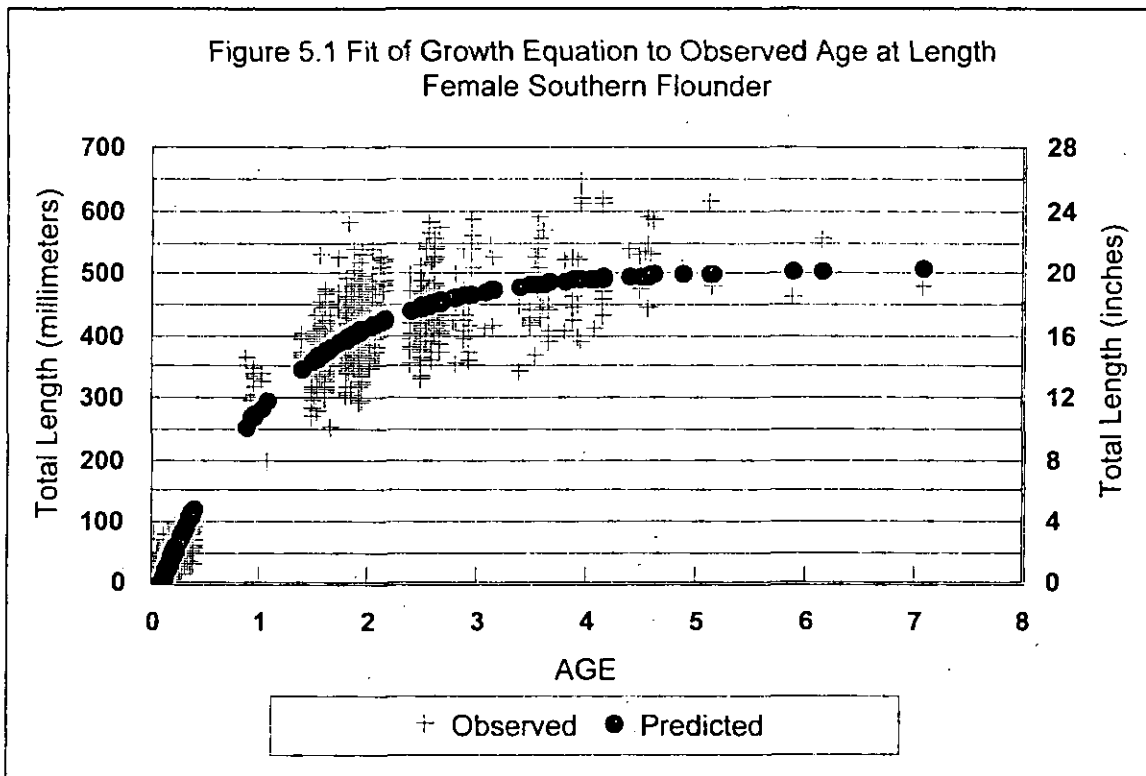


Figure 5.3 - Commercial Harvest of Southern Flounder  
in Louisiana

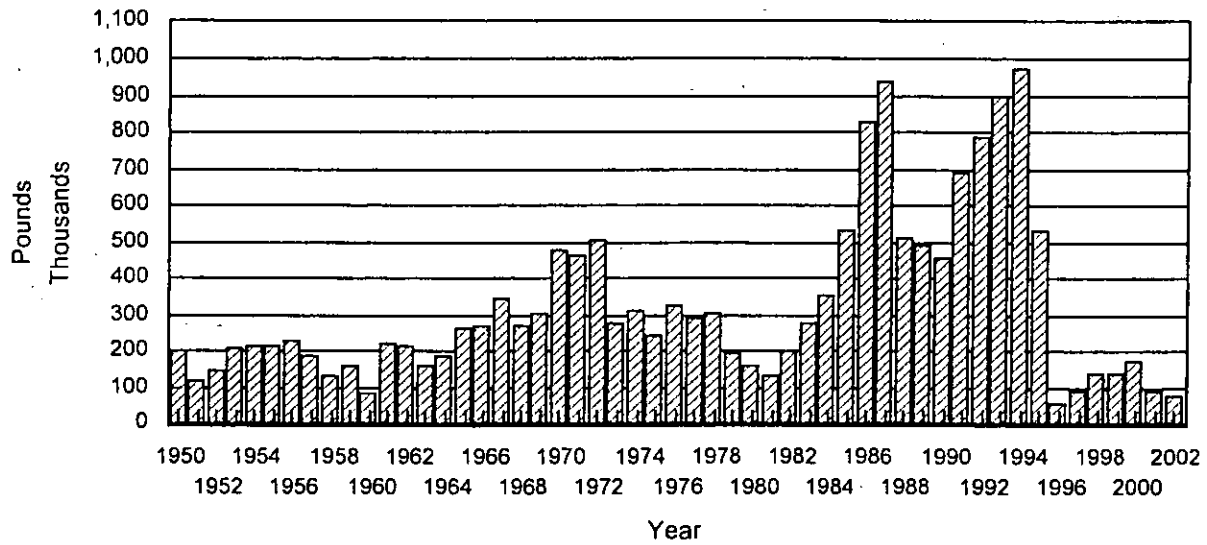


Figure 5.4 - Louisiana Commercial and Recreational Harvest  
of Southern Flounder

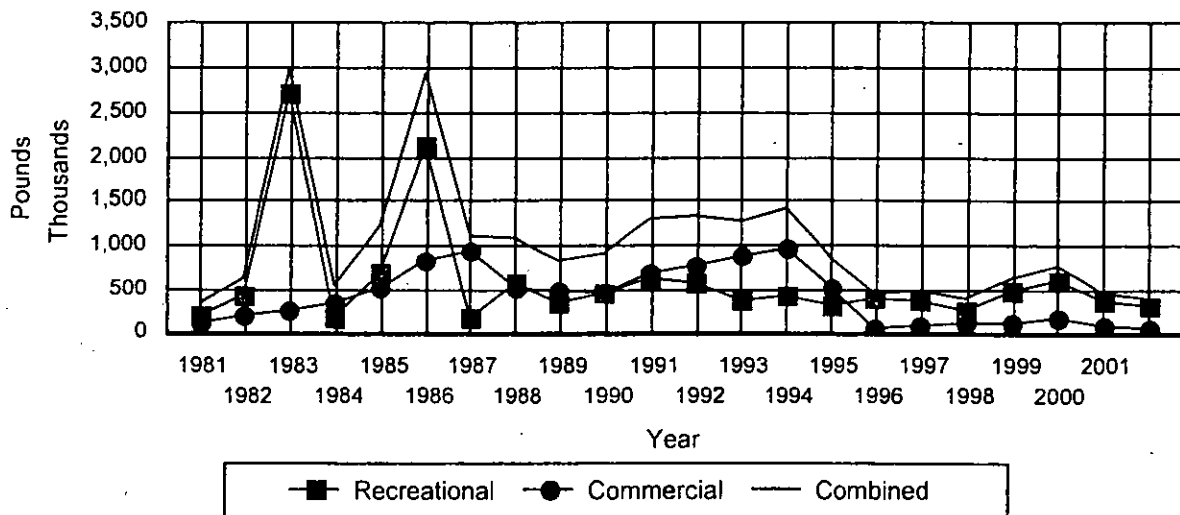


Figure 5.5 - Catch per Effort of Southern Flounder in Louisiana  
NMFS Marine Recreational Fishery Statistics Survey

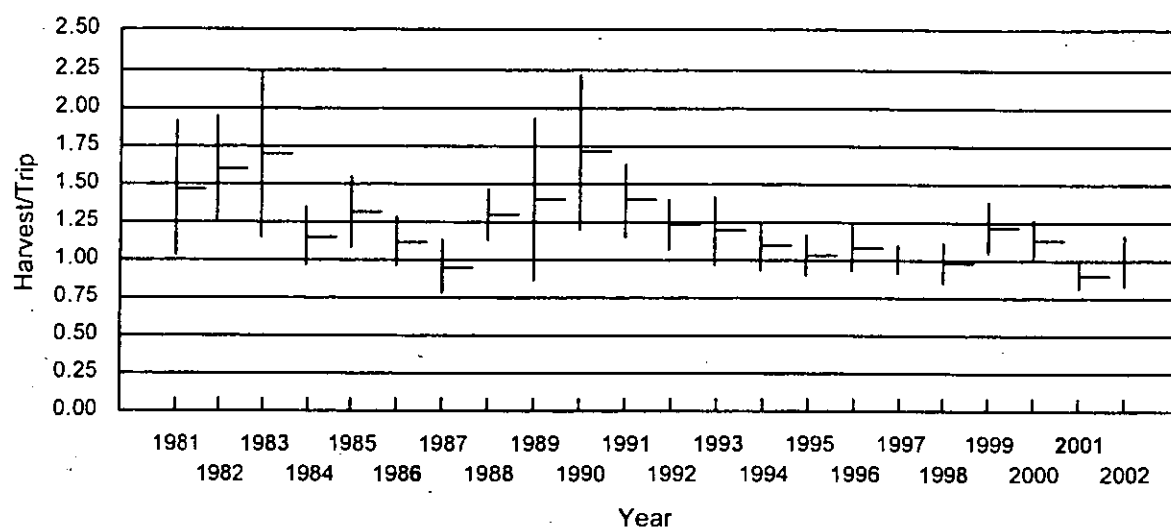
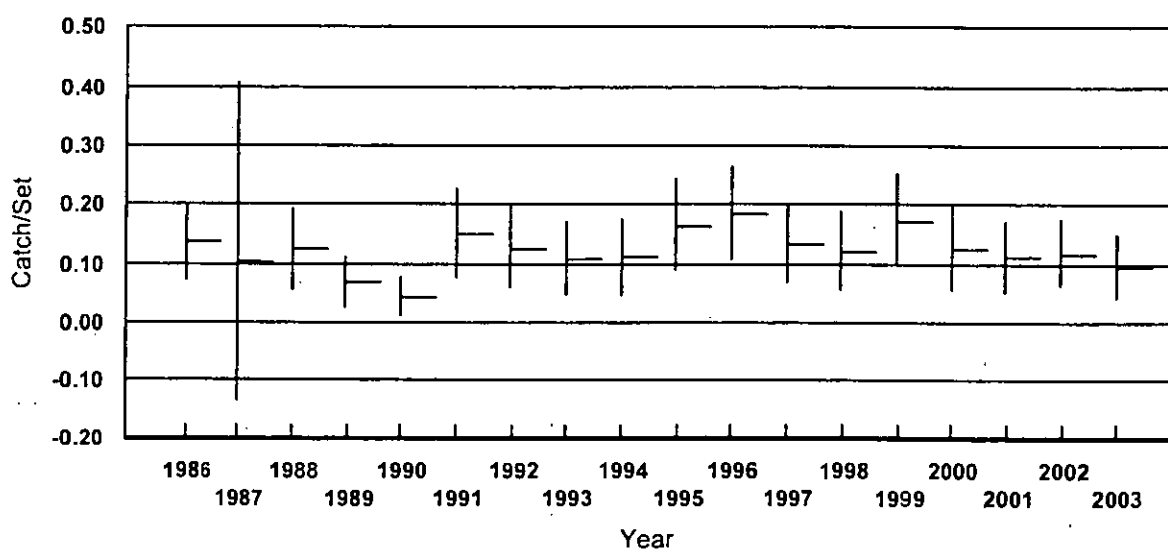


Figure 5.6A - Catch per Effort of Southern Flounder in Trammel Nets  
Marine Fisheries Division, Monitoring Program (January - March)



Draft - January 16, 2004

Figure 5.6B - Catch per Effort of Southern Flounder in Trammel Nets  
Marine Fisheries Division, Monitoring Program (October - December)

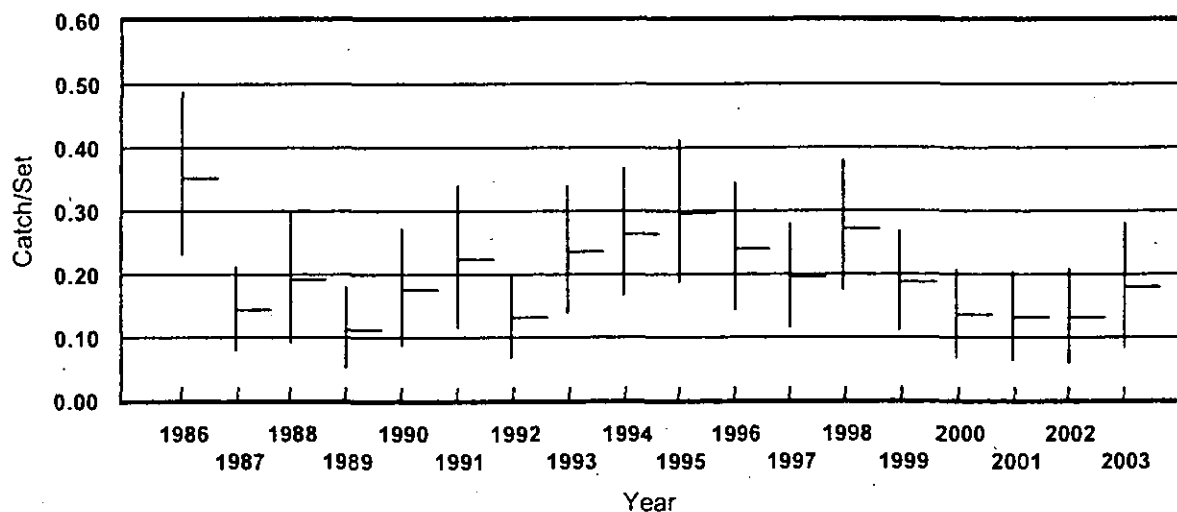
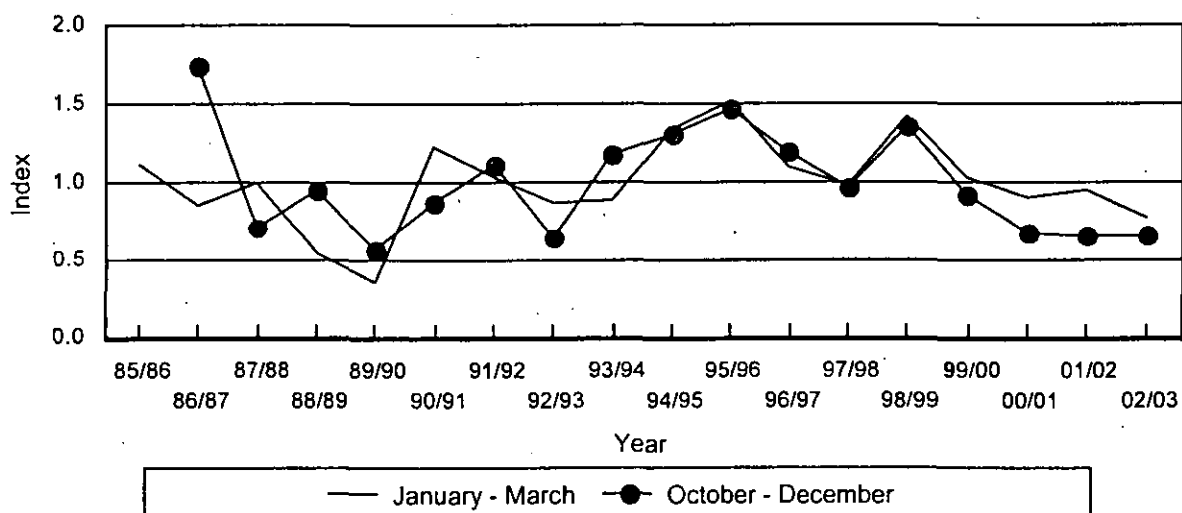
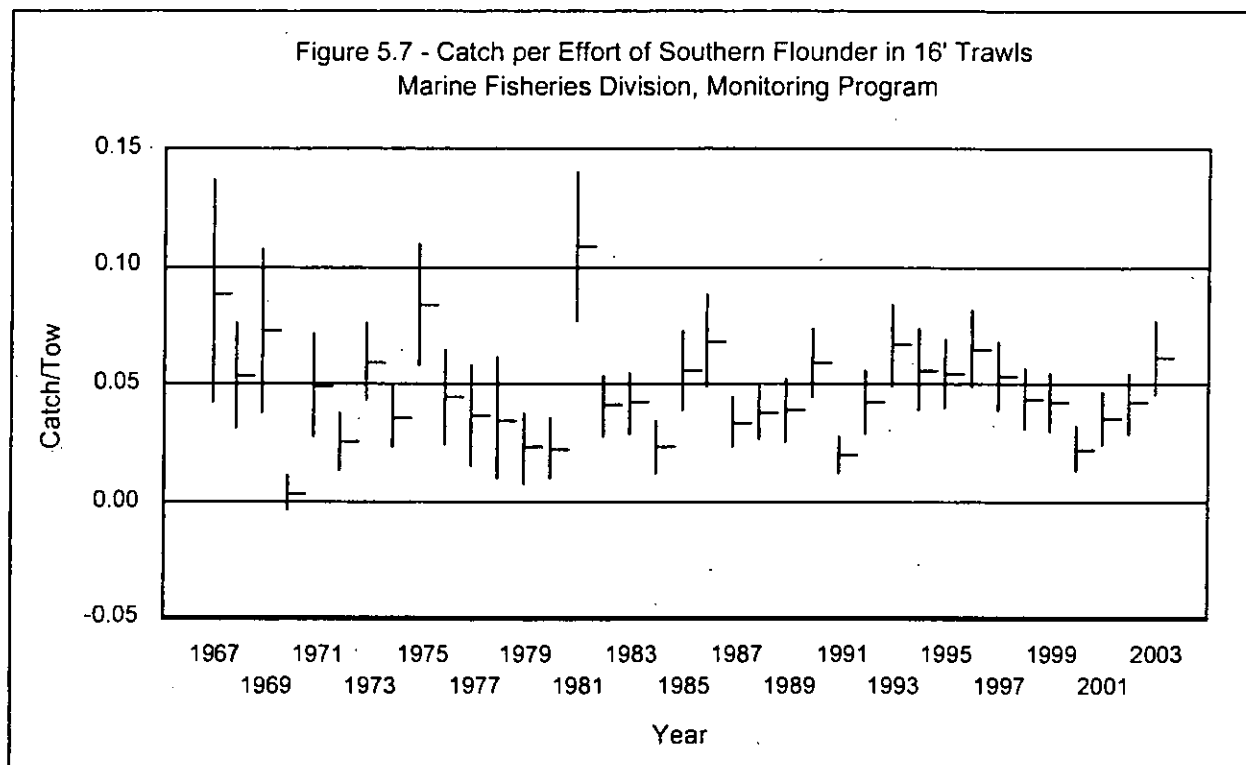


Figure 5.6C - Standardized CPUE of Southern Flounder in Trammel Nets  
Marine Fisheries Division, Monitoring Program







## SHEEPSHEAD SUMMARY OF CHANGES FROM 2003 ASSESSMENT

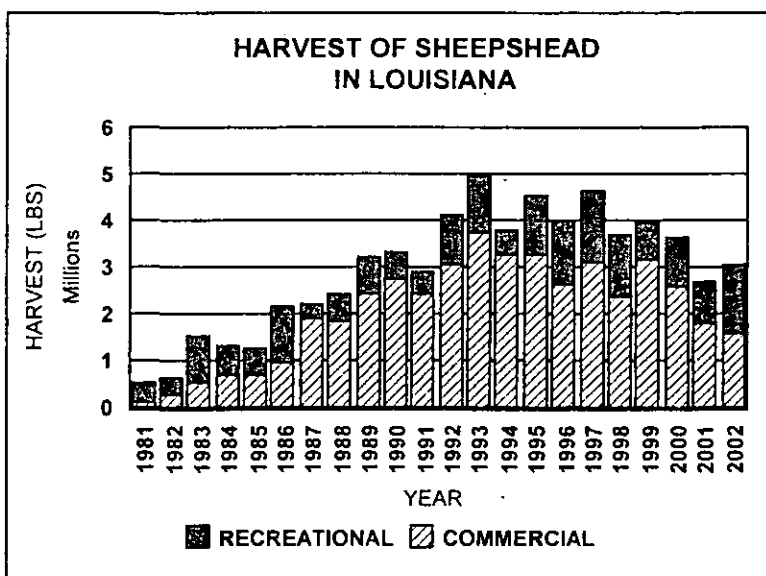
This summary is intended to provide a quick reference of substantive changes in methods or corrections in this year's assessment from the 2003 assessment conducted for Sheepshead.

- There is no substantive change in methods from the 2003 assessment.

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### 2004 DOCUMENT HIGHLIGHTS

- 2002 combined commercial and recreational harvest of 3,061,183 pounds is 330,324 pounds higher than 2001 and the second lowest year since 1992.
- The results of YPR analysis indicate that if  $M=0.2$  (the most conservative value within the range of estimates), the fishery in the years assessed (1997 - 2002) was operating at or below  $F_{0.1}$  and well below  $F_{MAX}$ , with yield of 34% to 74% of maximum, and SPR at 53% to 81%. An  $M$  of 0.3 (the highest value examined) would indicate a more lightly fished stock with yield being 0% to 40% of maximum and with SPR being 71% to 100%.
- It should be noted that the method used in this assessment to determine the status of the stock, reflected in the estimates of disappearance, is not immediately sensitive to changes in regulations. Sheepshead enter the fishery at age 2 and are fully recruited by age 6 or 7. It takes several years of consistent regulations after regulations are imposed before the impact of those regulations can be measured. In the case of sheepshead it would take 5 to 6 years of consistent regulations assuming selectivities of age 7 and older is 100%.
- As a result of having several years of commercial trip ticket data, and collecting recreational fishery statistics data, the department was able to begin a program to representatively sample fishery dependent otoliths in 2002. The program uses trip ticket data and recreational survey data to weight sampling sites for the collection of otoliths for the species of interest. It is expected that this method of otolith sampling will improve stock assessments by providing more accurate annual catch-at-age data.



## SHEEPSHEAD

### 5.0 STOCK ASSESSMENT

This assessment uses yield-per-recruit (YPR), Spawning Potential Ratio (SPR) and catch curve analyses to estimate the impact of fishing pressure on potential yield and the spawning potential of the sheepshead stock in Louisiana waters. Estimates derived from YPR and SPR are based on information regarding the growth rate and spawning potential of the fish, and on estimates of the natural mortality rate (M) and fishing mortality rate (F) on the stock. Catch-curve analysis estimates disappearance rates (Z') from the fishery based on the relative abundance of each age class in the harvest. The results from this assessment provide a generalized approach towards estimating the impact of fishing on the spawning potential and potential yield of the fish stock. The spawning biomass of females is assumed to be the factor limiting the spawning potential of the stock; therefore, where possible, only data on female sheepshead are used. Yield-per-recruit and SPR analysis, as with many other generalized assessments, should be used only as a guide until a more comprehensive assessment can be conducted.

In developing a stock assessment, the unit stock must be defined. While a unit stock is often represented by that portion of the population which is genetically similar, for our purpose, the most applicable definition seems to be one which considers the unit stock as that portion of the population which is either dependent on Louisiana waters, or which is available to Louisiana fishermen.

#### 5.1 Growth

Von Bertalanffy growth parameters developed by Beckman et al. (1991) from fish harvested in Louisiana were used to calculate length and weight at age for female sheepshead. The equations are as follows:

$$\text{Female } L_t = 447(1 - e^{-0.367(t+1.025)})$$

$$\text{Female } W_t = 2557(1 - e^{-0.219(t+3.061)})^{2.85}$$

where,  $L_t$  = length at age  $t$ ,  $W_t$  = weight at age  $t$  and  $t$  = age in years. Age at length is calculated as:

$$t = 1.025 + \ln(1 - L_t/446)/-0.367$$

#### 5.2 Natural Mortality

Natural mortality is one part of total mortality (Z) and is the mortality due to all causes other than fishing. These include predation, disease, spawning stress, starvation, and old age. Typically, natural mortality is estimated, as it is difficult to directly measure, especially on exploited fish stocks where natural mortality and fishing mortality occur simultaneously. No direct measure of natural mortality for sheepshead is available; therefore, several established estimation procedures were used to derive an estimate. The procedures are presented below and are taken from Sparre and Venema (1992).

Pauly (1980) provides a method of estimating natural mortality from a set of parameters including the asymptotic length and growth rate of the fish, and the average water temperature of

the environment. The growth parameters from the von Bertalanffy growth equation described in Section 5.1 and the mean annual water temperature, derived from readings from a set of four constant recorders located throughout the Barataria Bay system, were used in the calculation. The mean water temperature was 22.7°C for the period 1989 - 1992 (pers. comm., M. Kasprzak, 4/13/92). These values were incorporated into the length-based function of Pauly (1980):

$$\ln(M) = -0.0152 - 0.279 * \ln(L_{\infty}) + 0.6543 * \ln(K) + 0.463 * \ln(T)$$

where,  $\ln(M)$  = natural log of natural mortality,  $\ln(L_{\infty})$  = natural log of the asymptotic length,  $\ln(K)$  = natural log of the growth coefficient and  $\ln(T)$  = natural log of the mean annual temperature in degrees Celsius.

Use of Louisiana data on growth and water temperature applied to Pauly's function results in a natural mortality estimate of  $M=0.4$ .

Alagaraja (1984) and Hoenig (1983) provide methods of estimating  $M$  based on the fishes lifespan or longevity, and with the assumption that  $M=Z$ . Longevity is also difficult to determine for exploited fish stocks, since the age distribution is usually truncated by fishing, but these methods are as useful as any in providing provisional estimates of natural mortality. The functions described by Alagaraja (1984) are:

$$\begin{aligned} M1\% &= -\ln(0.01)/T_m \\ M0.1\% &= -\ln(0.001)/T_m \end{aligned}$$

where,  $M1\%$  and  $M0.1\%$  are the natural mortality rates corresponding to 99% and 99.9% mortality, respectively, given a fishes lifespan ( $T_m$ ) in years. Sheepshead in Louisiana have been aged to 20-years-old (Beckman et al. 1991). If it is assumed that 99% or 99.9% of the fish die by age 20 then the corresponding natural mortality rates for  $M1\%$  and  $M0.1\%$  would be 0.2 and 0.35 respectively.

The function described by Hoenig(1983) is:

$$\ln(Z) = 1.46 - 1.01 * \ln(T_m)$$

where, when  $M=Z$ , longevity ( $T_m$ ) can be defined as the maximum survival age. If we assume that the maximum age of sheepshead has been truncated due to fishing from 25 to 20 years, the resulting estimate of natural mortality, given  $T_m=25$ , would be 0.2.

Another method of estimating  $M$  is described by Rikhter and Efanov (1976) and utilizes population age at sexual maturity. The function is:

$$M = 1.521/(T_m 50\%^{0.720}) - 0.155$$

where,  $T_m 50\%$  is the age at which 50% of the population is mature. Age 2 is assumed the age at 50% maturity for the sheepshead population (Render and Wilson 1992) resulting in an  $M$  of 0.77.

In summary, the estimated rates of natural mortality for sheepshead in Louisiana using a variety of estimation procedures are as follow:

|                           |               |
|---------------------------|---------------|
| Pauly (1980)              | 0.40          |
| Alagaraja (1984)          | 0.20 and 0.35 |
| Hoenig (1983)             | 0.20          |
| Rikhter and Efanov (1976) | 0.77          |

### **5.3 Disappearance Rates and Fishing Mortality**

The disappearance rate ( $Z'$ ) from the fishery comprises the total mortality (natural + fishing) and some unknown rate of decreasing availability of the fish to the fishery. If the unknown rate of availability is small or nonexistent, then the disappearance rate will be a reasonable estimate of total mortality. However, if a large portion of the disappearance rate is due to fish not being available to the fishery, then assuming  $Z'=Z$  will overestimate the impact of fishing.

An annual catch-at-age matrix was developed by applying the growth equation presented in Section 5.1 to the years where length frequency data for the commercial and recreational fishery was available (1994 - 2002). Length frequency data were obtained from the Trip Interview Program (TIP) for the commercial fishery, and from the National Marine Fisheries Services' (NMFS) Marine Recreational Fishery Statistics Survey (MRFSS) for the recreational fishery. Fish with lengths greater than the asymptotic length were not used in developing catch-at-age and therefore not used in estimating disappearance rates. The elimination of these fish reduces the number of large fish that are typically older fish used in estimating disappearance and produces a more conservative estimate. The data from both of the surveys did not distinguish between sexes. Therefore, we assumed for this assessment that all fish sampled were female. To calculate disappearance rates, we regressed the natural log of the catch-at-age, beginning with the age at full recruitment to the fishery. This method assumes that recruitment is constant and the fishery is in equilibrium. A range of natural mortality rates were used in the assessment. After reviewing estimates of  $M$  in Section 5.2, we chose not to assume either method of estimating  $M$  was better than another, but rather to present results for the range of estimates. The range of  $M$  was from 0.20 - 0.77. We chose to use an  $M$  of 0.2 as the lowest estimate of  $M$  since it was the lowest estimate derived from the methods examined. Resulting disappearance rates using an  $M$  of 0.2 indicated a SPR values well above 30%; therefore, assessing the impact of an upper range of  $M$  was of little value in evaluating the status of the stock. However, we did use an upper range of 0.3 to evaluate how a change in  $M$  impacted resulting yield and SPR. Disappearance rates were calculated from the combined commercial and recreational catch-at-age data by year for 1994 - 2002. The calculated disappearance rates ranged from 0.27 to 0.57 (Table 5.1). The disappearance rate in 2001 (0.27) is below an  $M$  of 0.3, therefore; table 5.1 indicates 100% SPR and 0% yield. It is unknown if, an  $M$  of 0.3 is a realistic estimate of natural mortality, the stock is so lightly fished to provide those results or disappearance rates or the method used to calculate them are inaccurate.

Catch-at-age from the fishery for the years 1994-2002 was used to derive age-specific selectivities to be used in yield-per-recruit analysis. The method presented in Sparre and Venema (1992) was used to develop selectivities. This method uses a linearized catch curve to determine the selectivity of fish not yet fully recruited to the fishery. The ratio of the observed catches to the expected catches at each age is the probability of capture or selectivity of the fishery at age. This selection is then regressed in the equation:

$$\ln(1/S_i - 1) = T1 - T2 * t$$

where,  $S_t$  = the selectivity at age  $t$ , and  $T1$  and  $T2$  are constants corresponding to the intercept and slope of the regression. To develop theoretical or estimated selectivities at age the following equation is used.

$$S_t (\text{estimate}) = 1 / (1 + \exp(T1 - T2 * t))$$

Selectivities for ages up to full age-at-recruitment were used to describe the relative fishing mortality to that point; for age at full recruitment and older, selectivities are assumed to be 1, or 100% selected. Regulatory changes in the commercial fishery in 1995 and 1997 were evident in the selectivity patterns observed. Therefore, selectivities were grouped into 3 time periods to reflect those changes in the fishery. Prior to 1995, gillnets and trammel nets were fished in inshore waters of the state on primarily younger fish and were a significant contribution to the commercial landings of sheepshead. Currently, the fishery is primarily an otter trawl fishery on older fish in offshore waters and large bays and sounds. It is evident that the selectivity pattern in the most recent years are on older fish (Figure 5.1).

Selectivities are as follows:

| Age | 1994-1995 | 1996 | 1997-2002 |
|-----|-----------|------|-----------|
| 0   | 0.00      | 0.00 | 0.00      |
| 1   | 0.00      | 0.00 | 0.00      |
| 2   | 0.03      | 0.03 | 0.01      |
| 3   | 0.34      | 0.13 | 0.09      |
| 4   | 1.00      | 0.68 | 0.26      |
| 5   | 1.00      | 1.00 | 0.57      |
| 6   | 1.00      | 1.00 | 0.96      |
| 7+  | 1.00      | 1.00 | 1.00      |

#### **5.4 Yield-per-Recruit**

Yield-per-recruit and SPR analysis provide basic information on fish stock dynamics by estimating the impact of mortality on yield and the spawning potential of the stock. The results can be examined as to the sensitivity of natural and fishing mortality rates on yield and spawning potential.

The growth parameters described in Section 5.1, sexual maturity described in Section 5.2 and the age-specific selectivities described in Section 5.3 were incorporated into the yield-per-recruit and spawning potential analysis. Mean weight at age was used in the estimation of spawning potential. Natural mortality rates of 0.2 and 0.3 were used in the analysis because they are on the lower end of the range of estimates and would provide the most conservative results. These rates are also used to describe the sensitivity of  $M$  on yield and spawning potential. The results are presented in Table 5.2, which contains estimates of  $F_{MAX}$  (fishing mortality rate that produces maximum yield),  $F_{0.1}$  (fishing mortality rate representing 10% of the slope at the origin of a yield-per-recruit curve),  $F_{20\%SPR}$  (fishing mortality that produces 20% SPR),  $F_{30\%SPR}$  (fishing

mortality that produces 30% SPR), and annual estimates of  $F$  from the disappearance rates calculated in Section 5.3. Selectivities patterns of the fishery are recalculated with each additional year of data. Therefore, the results of this analysis, reflected in Table 5.2, could change each year depending on any change in selectivity patterns in the fishery.

### 5.5 Conservation Standards

Conservation standards are intended to protect the viability of a fish stock for future generations. These standards have historically been based on a number of biological measures of the dynamics of fish stocks, depending on the availability and adequacy of data. Conservation standards should be separated into two types: a conservation threshold which is entirely biologically based and, a conservation target which considers biological measures modified by relevant social, economic, and ecological factors. A conservation threshold is a biological baseline for the harvest of a fish stock and should not be exceeded. It is the highest level of fishing mortality that will ensure that recruitment overfishing will not occur. Beyond the conservation threshold, a conservation target may be set, providing for other management goals in the fishery. Such goals may include maximizing yield in weight or numbers of fish, economic benefits or profit, employment, or some other measurable goal. These targets should be set at a fishing mortality rate below that of the conservation threshold in order to ensure that the biological integrity of the stock is not damaged by fishing.

The spawning potential ratio (SPR) concept described by Goodyear (1989), is a species specific value expressed as the ratio of the spawning stock biomass (or egg production) per recruit (SSB/R) in a fished condition to the SSB/R in an unfished condition. The concept is based on the premise that below some level of SPR, recruitment would be expected to be reduced. Goodyear (1989), recommends that in the absence of sufficient data to provide a value specific to the stock in question an SPR of 20% be used as a threshold. Work on North Atlantic ground fisheries also resulted in the calculation of a threshold SPR of 20% (Gabriel et al. 1984, Gabriel 1985). An SPR of 20% has been recommended for Spanish and king mackerel in the Gulf of Mexico (National Oceanic and Atmospheric Administration/National Marine Fisheries Service 1995), while an SPR of 8-13% has been demonstrated to be sufficient for gulf menhaden (Vaughan 1987). In earlier analyses of Louisiana spotted seatrout fisheries (Louisiana Department of Wildlife and Fisheries 1991), an SPR threshold of 15% was recommended, based on several years of data. A more recent reassessment of threshold SPR for spotted seatrout by the department resulted in a median SPR of 18%. The change from 15% to 18% was due to changes in the methodology of the assessment, specifically the use of an improved maturity schedule with additional data from Louisiana specimens and the incorporation of the method used by Gabriel (Gabriel *et al.* 1984, Gabriel, 1985) to estimate median SPR. Mace and Sissenwine (1993) examined 90 stocks of 27 species, and reported that the average replacement SPR for all these stocks was 18.7%, while the most resilient quarter of the stocks required a maximum of only 8.6% SPR. These authors recommended an SPR of 30% be maintained when there is no other basis for estimating the replacement level, as this level was sufficient in maintaining recruitment for 80% of the stocks they examined. However, they noted that 30% may be overly conservative for an "average" stock, and reiterated the need for stock-specific evaluations of standards to enhance both safety and benefits in the fishery.

Sufficient information is not available to directly estimate a conservation threshold for sheepshead in Louisiana. However, the conservation target of 30% SPR established by the 1995

Regular Session of the Louisiana Legislature for black drum, sheepshead, southern flounder, and striped mullet appears to be adequate to maintain the sheepshead stock and prevent recruitment overfishing.

The use of any measure of the health of a fish stock as a perfect index is arguable. It is logical to conclude that growth overfishing should occur at a much lower fishing rate than that which would threaten recruitment. However, Mace and Sissenwine (1993) provide information to suggest that some stocks may have reduced recruitment at levels of fishing that would not reduce yield-per-recruit. The preferable position for making recommendations on appropriate levels of fishing for a stock is to base those recommendations on actual measures of spawning stock size and recruitment for both the species and fishery in question. This requires a base of information resulting from monitoring of both the stock and the fishery over a variety of conditions. Without this information, conservation standards may either underestimate or overestimate the potential of a fishery. If the potential is underestimated, society loses the economic and social benefits of the harvest. If the potential is overestimated and the fishery is allowed to operate beyond sustainable levels, society loses the benefits of a sustainable fishery, and recovery will require some period of rebuilding, when effort must be reduced from the non-sustainable levels (Hilborn and Walters, 1993).

## **5.6 Status of the Stock**

Sheepshead were lightly exploited until the early to mid-1980s when commercial harvest began to increase (Figure 5.2). Commercial landings have gone from 0.2 million pounds in the early 1980s to 2.4 - 3.7 million pounds in the 1990s. Landings have declined in the last eight years from a high of 3.7 million pounds in 1993 to 1.7 million pounds in 2001. Fishery dependent commercial data prior to 1991 was obtained from NMFS's General Canvass Landing Program, from 1991 through 1998 it was collected by the Louisiana Department of Wildlife and Fisheries' (LDWF) Monthly Dealer Reports and from 1999 to present LDWF's Commercial Reporting Requirement "Trip Tickets" program is utilized to gather this type of data.

Harvest from the recreational fishery obtained through the NMFS's MRFSS fluctuated from a low of 0.4 million pounds in 1981 to a high of 1.5 million pounds in 1997. Recreational harvest for the years examined (1981-2001), were equal to those of the commercial fishery until 1987 when the commercial fishery began to expand (Figure 5.3). Mean catch-per-trip from the recreational fishery was calculated by selecting those trips that had sheepshead in their catch. The results are presented in Figure 5.4 along with 95% confidence limits around the mean. The catch-per-unit-effort (CPUE) indices fluctuated with no indication of a long-term downward trend. CPUE for 2002 was not statistically lower than the other years analyzed. Fisheries dependent recreational landings data is collected through the NMFS's MRFSS and currently collected by LDWF Biologists.

Catch-per-effort data from the Department's, fishery-independent trammel net (750' x 6' - 1 5/8" inner, 6" outer wall) and small mesh bag seine (50' - 1/4" delta mesh) samples were calculated as follows:

$$\text{Mean CPUE} = ( \exp ( \sum \ln ( \text{catch} + 1 ) / N ) ) - 1$$



where, catch is the total number caught in each set and, N is the number of samples taken annually. Trammel net and seine data were used for the period 1986-2002. Trammel net samples are collected from October through March. In order to use the most recent data available to us in this report, trammel net CPUE was estimated for October-December only. This allowed the use of 2003 data through December. Seine and trammel net CPUE fluctuated throughout the time period with no indication of a long-term downward trend; however, mean CPUE in seines for 2003 ranks among the lowest observed (Figure 5.5). Mean CPUE in trammel nets for 2003 fell below the high years of 2000 and 2001, but was not significantly lower than any of the years examined (Figure 5.6).

Rules for the commercial harvest of sheepshead changed on August 15, 1995 when Act 1316 of the 1995 Regular Legislative Session, the Marine Resources Conservation Act of 1995, became effective. This act outlawed the use of "set" gill nets or trammel nets in saltwater areas of Louisiana, and restricted sheepshead harvest by the use of "strike" nets to the period between the third Monday in October and March 1 of the following year. A "Restricted Species Permit" was required in order to harvest sheepshead, and several criteria were established in order to qualify for that permit. After March 1, 1997, all harvest by gill or trammel nets was banned, and legal commercial gear to harvest sheepshead is limited to trawls, set lines and hook and line. This set of regulations had the effect of reducing the harvest of sheepshead by this segment of the commercial fishing industry.

It should be noted that the following results of YPR and SPR analysis do not reflect the impact of current regulations described above. With this type of general assessment, it will take several years before the impact of regulations will be observed in the disappearance rates from the fishery.

The results of YPR analysis indicate that if  $M=0.2$  (the most conservative value within the range of estimates), the fishery in the years assessed (1997 - 2002) was operating at or below  $F_{0.1}$  and well below  $F_{MAX}$ , with yield of 34% to 74% of maximum, and SPR at 53% to 81%. An  $M$  of 0.3 (the highest value examined) would indicate a more lightly fished stock with yield being 0% to 40% of maximum and with SPR being 71% to 100% (Table 5.2).

## **5.7 Research and Data Needs**

Estimates of natural mortality used in the present assessment show wide variation. This variation reduces the reliability of the present assessment in providing an accurate prediction of the potential yield of the stock, and also reduces the confidence level of the present estimate of SPR. A more precise estimate of natural mortality would assist in both of these problems.

Annual sex specific age-length keys should continue to be developed to provide catch-at-age data necessary to conduct age-based population assessments. The department is in the process of collecting otoliths for development of annual age-length keys.

Sex specific fishery dependent length frequency data is essential in adequately partitioning catch from the fishery. There can be significant improvement in the accuracy of this assessment if sex is collected.

The relationship between wetlands losses or modifications and the continuation of fishery production within the state has been discussed by many authors. However, this relationship is likely

to be different for the various fishery species. Understanding of this relationship for sheepshead should be an ongoing priority.

In the presence of changing regulations, fishery-dependent information is not a reliable source of data necessary to assess the status of a fish stock. However, such data are necessary to measure the effects of fishing on that stock. Consistent fishery-dependent and fishery-independent data sources, in a comprehensive monitoring plan, are essential to understanding the status of fishery stocks, and to identifying causes of changes in stock abundance. Present programs should be assessed for adequacy with respect to their ability to evaluate stock status, and modified or enhanced to optimize their capabilities.

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Table 5.1 Regression Output from the Estimation of Disappearance Rates

|                     |           |                     |           |
|---------------------|-----------|---------------------|-----------|
| 1994                |           | 1995                |           |
| Regression Output:  |           | Regression Output:  |           |
| Constant            | 15.016316 | Constant            | 15.039591 |
| Std Err of Y Est    | 0.2397288 | Std Err of Y Est    | 0.237857  |
| R Squared           | 0.9831213 | R Squared           | 0.984179  |
| No. of Observations | 11        | No. of Observations | 12        |
| Degrees of Freedom  | 9         | Degrees of Freedom  | 10        |
| X Coefficient(s)    | -0.523334 | X Coefficient(s)    | -0.496099 |
| Std Err of Coef.    | 0.0228572 | Std Err of Coef.    | 0.0198906 |
| 1996                |           | 1997                |           |
| Regression Output:  |           | Regression Output:  |           |
| Constant            | 15.188945 | Constant            | 15.77644  |
| Std Err of Y Est    | 0.3644981 | Std Err of Y Est    | 0.5880099 |
| R Squared           | 0.9601102 | R Squared           | 0.9114622 |
| No. of Observations | 11        | No. of Observations | 11        |
| Degrees of Freedom  | 9         | Degrees of Freedom  | 9         |
| X Coefficient(s)    | -0.511505 | X Coefficient(s)    | -0.539653 |
| Std Err of Coef.    | 0.0347535 | Std Err of Coef.    | 0.0560645 |
| 1998                |           | 1999                |           |
| Regression Output:  |           | Regression Output:  |           |
| Constant            | 14.162138 | Constant            | 16.177923 |
| Std Err of Y Est    | 0.3683201 | Std Err of Y Est    | 0.8169473 |
| R Squared           | 0.8944275 | R Squared           | 0.8357622 |
| No. of Observations | 10        | No. of Observations | 10        |
| Degrees of Freedom  | 8         | Degrees of Freedom  | 8         |
| X Coefficient(s)    | -0.333842 | X Coefficient(s)    | -0.573874 |
| Std Err of Coef.    | 0.0405507 | Std Err of Coef.    | 0.0899429 |
| 2000                |           | 2001                |           |
| Regression Output:  |           | Regression Output:  |           |
| Constant            | 14.349853 | Constant            | 13.434472 |
| Std Err of Y Est    | 0.6567616 | Std Err of Y Est    | 0.4687798 |
| R Squared           | 0.7228985 | R Squared           | 0.7836706 |
| No. of Observations | 10        | No. of Observations | 10        |
| Degrees of Freedom  | 8         | Degrees of Freedom  | 8         |
| X Coefficient(s)    | -0.330328 | X Coefficient(s)    | -0.277841 |
| Std Err of Coef.    | 0.0723071 | Std Err of Coef.    | 0.051611  |
| 2002                |           |                     |           |
| Regression Output:  |           |                     |           |
| Constant            | 15.33518  |                     |           |
| Std Err of Y Est    | 0.310255  |                     |           |
| R Squared           | 0.9570426 |                     |           |
| No. of Observations | 10        |                     |           |
| Degrees of Freedom  | 8         |                     |           |
| X Coefficient(s)    | -0.45602  |                     |           |
| Std Err of Coef.    | 0.034158  |                     |           |

**Table 5.2 - Results of Yield Per Recruit and SPR Analysis for Sheephead****M=0.2**

|        | F Ratio | YPR      | SPR   | %SPR   | %YPR    |                   |
|--------|---------|----------|-------|--------|---------|-------------------|
| Fmax = | 51.6724 | 542.6297 | 594   | 11.36% | 100.00% | <b>Benchmarks</b> |
| F0.1 = | 0.3437  | 394.6224 | 2,877 | 55.02% | 72.72%  |                   |
| F20% = | 9.1205  | 536.5425 | 1,046 | 20.00% | 98.88%  |                   |
| F30% = | 2.4540  | 517.3649 | 1,569 | 30.00% | 95.34%  |                   |
| 1997 = | 0.3397  | 393.2481 | 2,887 | 55.22% | 72.47%  | <b>Estimates</b>  |
| 1998 = | 0.1338  | 264.8513 | 3,778 | 72.26% | 48.81%  |                   |
| 1999 = | 0.3739  | 404.2018 | 2,800 | 53.56% | 74.49%  |                   |
| 2000 = | 0.1303  | 260.9248 | 3,802 | 72.72% | 48.09%  |                   |
| 2001 = | 0.0778  | 188.1420 | 4,236 | 81.02% | 34.67%  |                   |
| 2002 = | 0.2560  | 357.8359 | 3,154 | 60.32% | 65.94%  |                   |

**M=0.3**

|        | F Ratio  | YPR      | SPR   | %SPR    | %YPR    |                   |
|--------|----------|----------|-------|---------|---------|-------------------|
| Fmax = | 53687092 | 448.1602 | 0     | 0.00%   | 100.00% | <b>Benchmarks</b> |
| F0.1 = | 0.5570   | 240.7092 | 1,601 | 60.96%  | 53.71%  |                   |
| F20% = | 33.4831  | 394.4429 | 525   | 20.00%  | 88.01%  |                   |
| F30% = | 8.6460   | 366.4702 | 788   | 30.00%  | 81.77%  |                   |
| 1997 = | 0.2397   | 170.3724 | 1,934 | 73.64%  | 38.02%  | <b>Estimates</b>  |
| 1998 = | 0.0338   | 40.7568  | 2,471 | 94.09%  | 9.09%   |                   |
| 1999 = | 0.2739   | 182.0656 | 1,881 | 71.63%  | 40.63%  |                   |
| 2000 = | 0.0303   | 36.9478  | 2,485 | 94.65%  | 8.24%   |                   |
| 2001 = | 0.0000   | 0.0000   | 2,626 | 100.00% | 0.00%   |                   |
| 2002 = | 0.1560   | 133.4234 | 2,095 | 79.77%  | 29.77%  |                   |

Figure 5.1 - Sheephead Selectivity  
in Louisiana

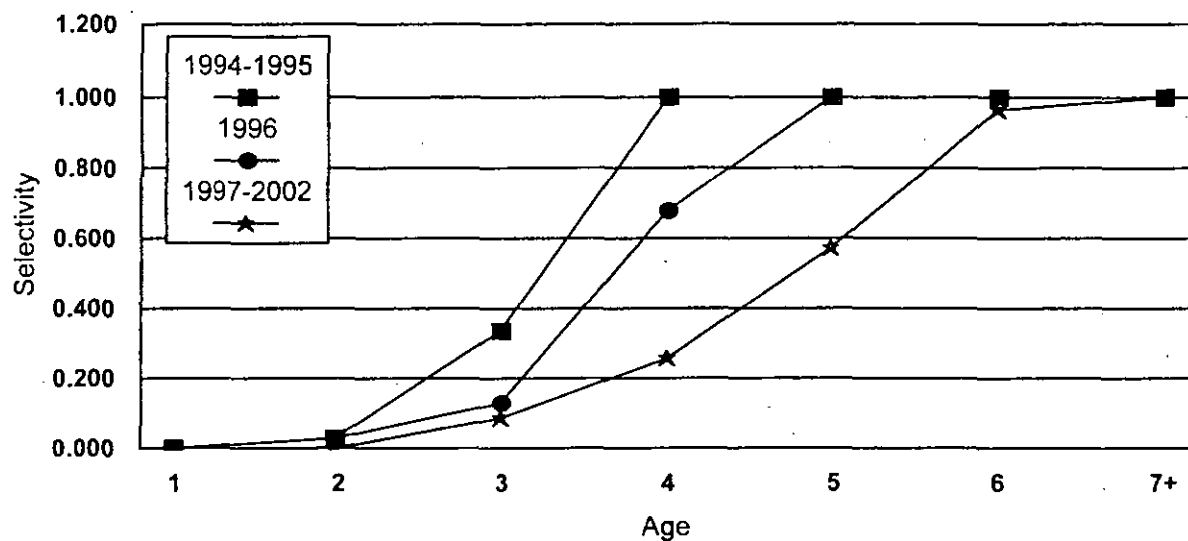


Figure 5.2 - Commercial Harvest of Sheephead  
in Louisiana

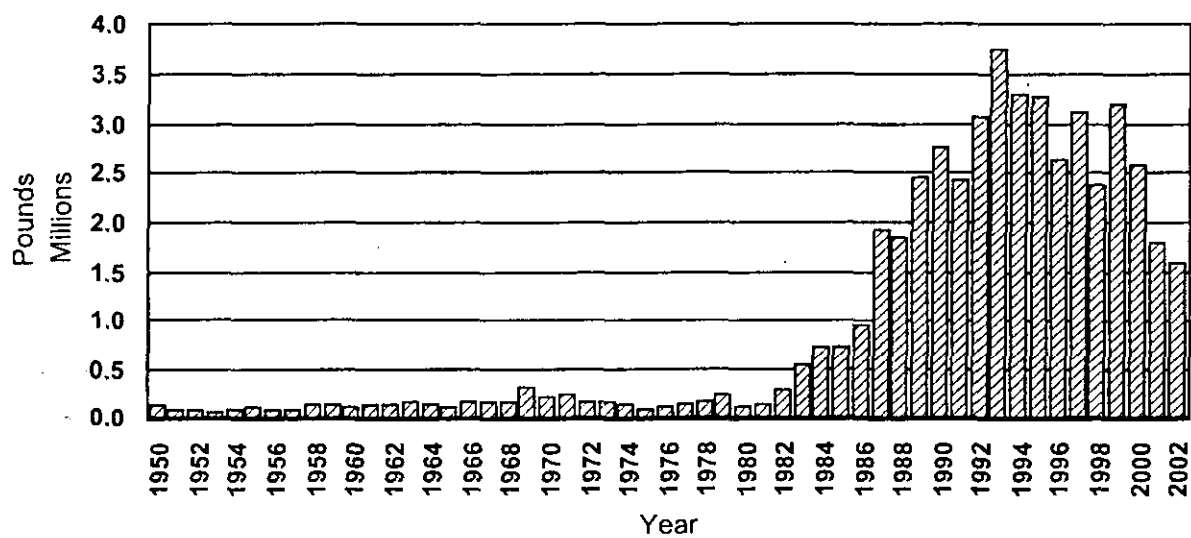


Figure 5.3 - Louisiana Commercial and Recreational Harvest of Sheephead

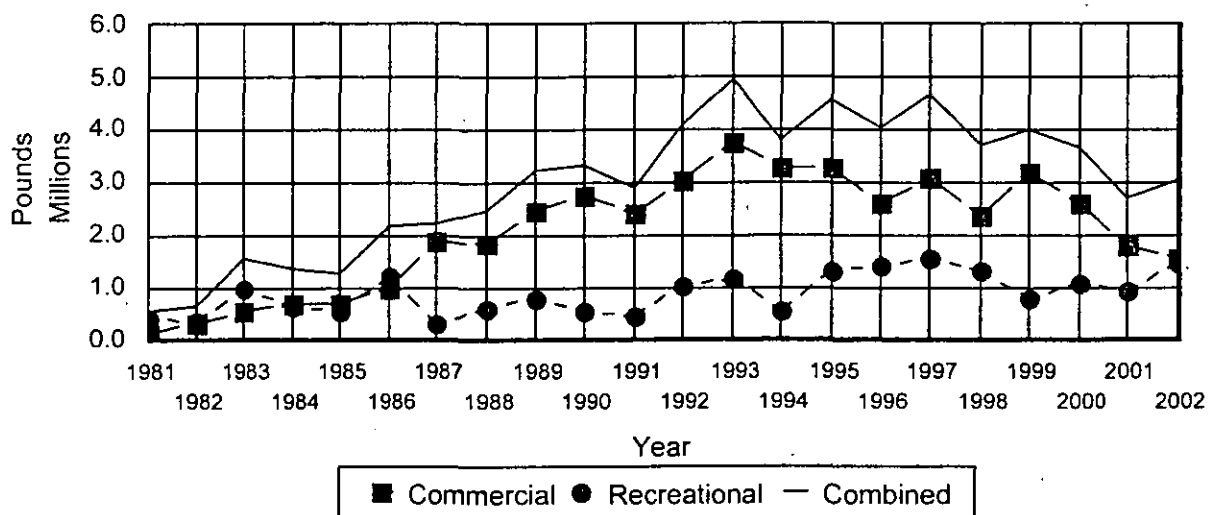


Figure 5.4 - Catch per Effort for Sheephead in Louisiana  
NMFS Marine Recreational Fishery Statistics Survey

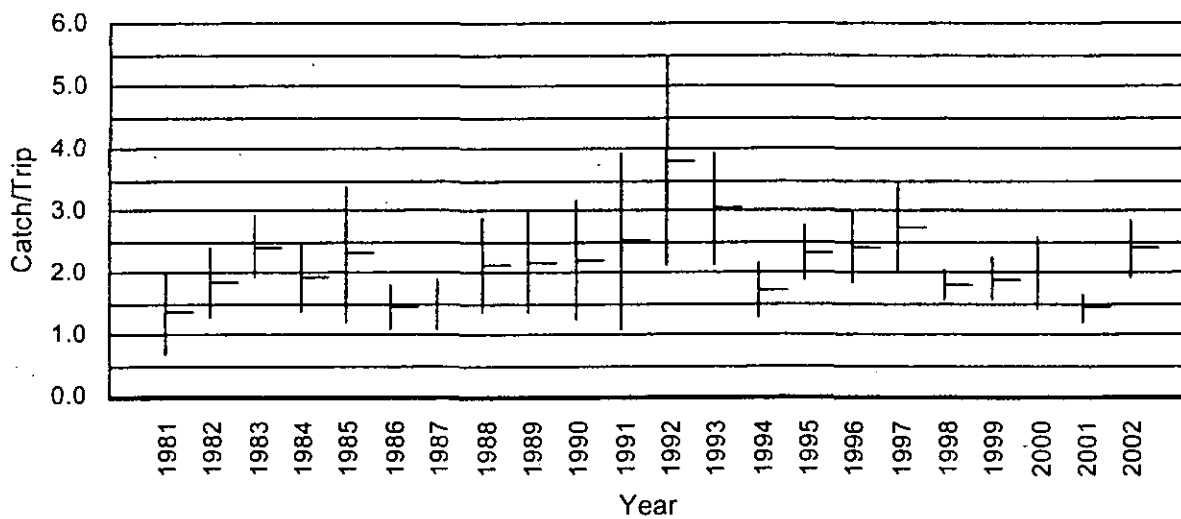




Figure 5.5 - Catch per Effort for Sheephead in Seines  
Marine Fisheries Division, Monitoring Program

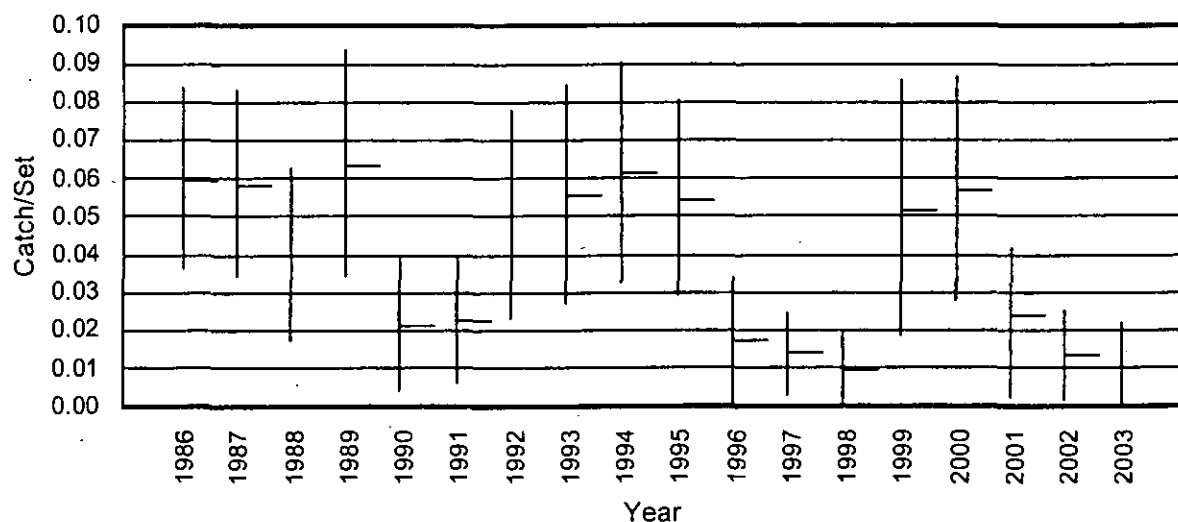
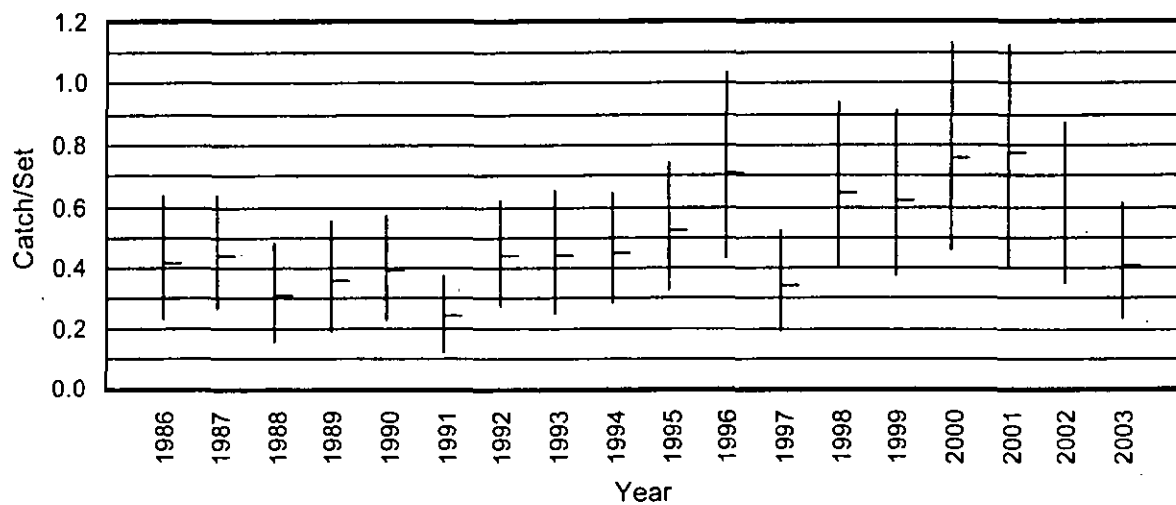


Figure 5.6 - Catch per Effort for Sheephead in Trammel Nets  
Marine Fisheries Division, Monitoring Program



## DERELICT CRAB TRAP PRESENTATION

### Commission – Feb 2004

SLIDE Mr. Chairman and fellow Commission members, I will be making a brief presentation on the Department's derelict crab trap removal program.

SLIDE "What is a derelict crab trap?" is a question we hear often from the general public. For our purposes, a derelict crab trap is defined as any crab trap that is not being actively fished. Consequently, a derelict crab trap may range from a new buoyed trap to an old barnacle encrusted, smashed trap.

SLIDE The issue we are addressing with our program is the large number of derelict crab traps which occur in Louisiana's coastal waters. The solution appears to be simple – that is, remove the traps from the water and bring them ashore where they can be disposed of properly.

However, as we have learned, there were some legal, fisheries, landowner, and logistical issues that had to be addressed and resolved.

SLIDE I will first briefly review the regulatory process. Act 48 of the 2003 Legislative Session gave the Commission the authority to establish a derelict crab trap program, and specified that the Commission designate the following:

- \*the trap closure area
- \*who may remove the derelict crab traps
- \*the disposal sites for the traps and
- \*the beginning and ending dates of the trap closure

The trap closures were restricted to two time periods:

- \*up to a 16 day consecutive day period between Feb 1 and Mar 31
- \*up to a 14 day consecutive day period which includes the opening of the spring inshore shrimp season.

SLIDE The Commission approved a Notice of Intent at the Sept, 2003 meeting to establish a derelict trap removal program in 2004. The rule was published in the January LA Register.

Winter and spring crab trap closures were approved.

The spring closure encompasses a portion of western Vermilion Bay for 9 or 14 days that includes the opening of the spring inshore shrimp season.

The winter closure includes a portion of the upper Terrebonne Bay estuary from Feb 28 – Mar 14, 2004.

Some other stipulations included:

- 1. Anyone can pick up traps
- 2. Traps must be brought to designated disposal sites
- 3. Traps must not be taken outside of the closure area

- 4. For the winter closure, traps can be removed only during daylight hours

SLIDE The spring closure in western Vermilion Bay includes 198,000 acres, although no crab traps are used on the State Wildlife Refuge and some of the marsh areas.

SLIDE A 182,000 acre area is included in the winter closure in upper Terrebonne Bay.

A large portion of the trap closure area is privately owned. Except for some restricted areas that will be shown on maps distributed to volunteers, the two large landowners in the area have given permission for the volunteers to access their property to collect derelict traps during the closure period.

SLIDE This map shows the closure areas with reference to the entire LA coast.

Relatively small areas were selected to facilitate success of the program in the first year. What we learn in the first year of the program will be applied to future trap sweeps.

SLIDE The spring closure in Vermilion Bay will address deep water traps in open water, with the primary participants being shrimp fishermen who capture traps in their gear.

The following has been accomplished:

- Tentative disposal sites have been selected
- A volunteer information packet has been prepared, and also placed on the internet
- A mail out to local shrimp and crab fishermen is planned for mid-March

SLIDE From this point on, I will be talking about the winter closure in upper Terrebonne Bay. This closure will address shallow water traps in the marsh and bayous, with volunteers from a wide range of user groups picking up traps.

This area was selected because there is a high concentration of derelict crab traps.

Major emphasis has been placed on planning, publicity, and volunteer recruitment.

SLIDE A planning or steering committee was formed last summer. Membership included:

- Coastal Conservation Association
- Barataria-Terrebonne National Estuary Program
- Crab Task Force
- Louisiana Wildlife Federation
- LSU Sea Grant and Extension Service

We had four meetings to discuss and plan for publicity, volunteer recruitment, volunteer supplies and incentives, and logistics.

SLIDE I think it is appropriate to acknowledge those institutions, organizations, groups, and companies that have helped the program.

First, the planning committee that I mentioned earlier has been invaluable to the program. The program would have been extremely difficult without their help and participation.

With respect to funding, the NOAA Habitat Restoration Center is providing federal funds. In addition, the crab industry as represented by the Crab Task Force has endorsed the dedication of leftover monies from a Section 201 appeal to derelict trap removal. The Gulf States Marine Fisheries Commission is coordinating the gulfwide federal project.

Finally, two landowners, Louisiana Land and Exploration Co. and Apache Minerals Inc have graciously agreed to allow volunteers on most of their property. On areas that are off limits to volunteers, they are asking their leaseholders to participate in the program.

**SLIDE** Since the fall, there has been several Department news releases and numerous magazine and newspaper articles about the program.

Individuals on the planning committee have been interviewed at least four times on the radio.

An information packet was mailed to all commercial and recreational crab trap fishermen in parishes surrounding and adjacent to the closure area.

The Department, with assistance from LSU Sea Grant, has prepared a brochure and volunteer instruction sheet.

Finally, background information, maps, regulations, and the volunteer instruction sheets are also posted on the derelict crab trap web site.

**SLIDE** I would like to mention two upcoming media events.

First, the CCA is sponsoring a Pre-Trap Sweep Media Day on Feb 17. The media will be brought out in boats to observe derelict crab traps prior to the trap sweep.

The media will also be invited to document the trap sweep on Feb 28 at the Pt aux Chenes Marina. They will have the opportunity to go on boats to observe the volunteers picking up the traps and also to watch volunteers returning to the disposal site.

**SLIDE** Obviously, the key to a successful trap sweep is the volunteers. Without volunteers the program cannot succeed.

The CCA and Wildlife Federation have sent notices to their members soliciting volunteers. In addition, recent newspaper articles and our crab fishermen mail out has resulted in numerous inquiries about the program.

**SLIDE** Specific plans for the winter trap sweep are outlined here.

The four designated disposal sites include: Cozy Campers on Robinson Canal; Seabreeze Marina on Bayou Terrebonne; Pointe aux Chenes Marina; and Josh's Marina at Catfish Lake.

A contractor will place dumpsters at each site and haul off the traps for proper disposal.

The primary volunteer days are Feb 28 & Mar 6, with Mar 13 being the bad weather day. However, volunteers may pick up derelict crab traps anytime during the trap closure period from within the trap closure area.

On the main volunteer days, the volunteers will be given maps, instructions, and some supplies. The Department will provide tarps, gloves, garbage bags, and grappling hooks.

In addition, BTNEP will provide free T-shirts and towels for all volunteers.

Dept personnel will also be collecting data, including number of traps, and volunteer time and expenses.

**SLIDE** In recent years derelict crab trap sweeps have been very successful in other Gulf States.

In 2002 & 2003, over 17,000 derelict crab traps have been collected in Texas, Mississippi, and Alabama.

## **CLOSING SCENE**

This concludes the presentation. Are there any questions?

## **DERELICT CRAB TRAP VOLUNTEER INFORMATION SHEET**

### **Winter Closure: Upper Terrebonne Bay**

**THANK YOU** for your interest in Louisiana's derelict crab trap removal program. The lead agency for this program will be the Louisiana Department of Wildlife and Fisheries (LDWF); however, other institutions and organizations (Barataria - Terrebonne National Estuary Program, Louisiana Crab Task Force, Coastal Conservation Association, Louisiana Wildlife Federation, and Louisiana Sea Grant) have endorsed the program and have been working with the LDWF in developing plans for the removal of derelict crab traps.

This program is volunteer-based and cannot succeed without help from those who enjoy our coastal waters and are willing to work to help make a difference. Your cooperation will facilitate the success of the 2004 derelict crab trap sweep in upper Terrebonne Bay. If the up-coming project is successful, other areas in need of a crab trap sweep will be selected in coming years.

#### **When and Where**

The removal of derelict crab traps will take place over a 15-day period from February 28, 2004 through March 13, 2004 within the upper Terrebonne Bay estuary in Lafourche and Terrebonne Parishes as described later.

#### **Regulations and Guidelines**

A large portion of the closure area is privately owned. State derelict crab trap regulations do not provide authorization for access to private property; authorization can only be provided by individual landowners. Property owners (i.e., Apache Louisiana Minerals, Inc., Louisiana Land and Exploration Company) have graciously agreed to allow volunteers on portions of their property to retrieve derelict crab traps. Volunteers should comply with the following (please note that other restrictions may be added):

- Access will not be allowed on restricted areas as described later. Larger, more detailed maps will be distributed to volunteers at the disposal sites.
- Access to other nonrestricted private property is solely for derelict crab trap removal during the trap closure period only.
- Respect property and do not litter.

Crab traps remaining in the closure area will be considered abandoned and volunteers will be allowed to retrieve these crab traps, subject to the following rules:

- Crab traps may be removed only from between one-half hour before sunrise to one-half hour after sunset from 6:00 a.m. February 28, 2004 through 6:00 a.m. March 14, 2004.
- Crab traps must eventually be brought to designated disposal sites and may not be possessed outside of the closure area.
- Designated disposal sites in the Terrebonne Bay estuary include:
  - Cozy Campers Campground on Robinson Canal. Located on LA Hwy. 56 between Chauvin and Cocodrie.
  - Seabreeze Marina on Bayou Terrebonne. Located on LA Hwy. 55 south of Montegut and Madison Canal.
  - Pointe aux Chenes Marina on Cut Off Canal. Located at the end of LA Hwy. 665.
  - Josh's Marina on canal leading to Catfish Lake. Located behind Crab Shack on LA Hwy 3235 in Golden Meadow.
- Crabs and other organisms in the derelict crab traps must be released.

#### **Volunteer Instructions**

The primary "volunteer" days are scheduled for the first two Saturdays of the closure (February 28 and March 6), although crab traps may be retrieved at other times as specified earlier. If either "volunteer" day is cancelled due to inclement weather, then Saturday, March 13, will be substituted.

LDWF personnel will be present at each disposal site on February 28 and March 6 beginning at 7:00 a.m. to provide additional instructions, maps, incentives, and supplies (tarps, grappling hooks, garbage bags, and gloves) to the volunteers. LDWF personnel will also collect data and assist with unloading of crab traps. First aid kits will be available if needed. Volunteers are asked to return the grappling hooks so that they may be re-used.

Volunteers may launch their boats at any site, but must bring the derelict crab traps to the designated disposal sites. A launch time between 7:00 and 9:00 a.m. is suggested, although volunteers may launch at any time.

The LDWF will be documenting the number of derelict crab traps collected at each site on the main "volunteer" days. Volunteer time and expenses will also be documented; the volunteer contribution will be used as a portion of the state match for federal funds. Volunteers collecting crab traps when LDWF personnel are not present are asked to submit data (see Data Collection) to the LDWF (see Contact Person).

Other instructions / suggestions include:

- Avoid confrontation with anyone who may claim derelict crab traps from within the trap closure area. The LDWF toll free number (1-800-442-2511) may be used to notify enforcement personnel.
- Volunteers may retrieve crab traps or unattached buoys and lines from anywhere in the non-restricted areas within the closure zone, but should first concentrate in the cleanup area designated for each disposal site to ensure a wider, more complete coverage of the entire area.
- To minimize travel time to and from the disposal sites, larger "mother vessels" may be present to collect crab traps from smaller boats. The mother vessels will bring the crab traps back to the disposal sites at the end of the day.
- The grappling hook can be used to retrieve crab traps that cannot be reached by boat.
- Remove and discard all organisms and any left-over bait from the crab trap.
- To reduce entanglement, cut the buoy line and place the buoy and line in a garbage bag.
- When retrieving crab traps at times other than the primary volunteer days, place the crab traps, buoys, and lines in the disposal receptacle. If possible, flatten the crab traps to maximize receptacle space.
- Do not remove crab traps from camp sites.

Safety is critical. The following are safety suggestions:

- Wear USCG approved personal flotation devices at all times.
- Wear appropriate protective clothing and heavy-duty footwear.
- Communication equipment such as cell phones and VHF radios (channel 68 Or 69) are recommended in case of emergency.
- Use caution when handling traps, especially those with barnacles, oysters, or exposed rusty wire.
- Antiseptics should be applied to cuts and abrasions.
- Use proper lifting techniques with crab traps.
- Leave crab traps that are too heavy to lift.
- Secure crab traps in boat as they are collected.

### **Data Collection**

The following information is needed from volunteers at the end of the day: Name; Address; Organization Represented; Date; Number of Crab Traps Retrieved; Number of Volunteers; Hours Worked; Trip Expenses (boat fuel, food, launch fee). As indicated earlier, this information will be used for a federal completion report. Forms will be distributed at the disposal sites or may be printed from the derelict crab trap web site ([www.blue-crab.net/form.html](http://www.blue-crab.net/form.html)).

### **How to Volunteer**

In order to better manage volunteer effort and crab trap retrieval activities, volunteers are asked to sign up in advance. Please notify the contact person (see below).

### Contact Person

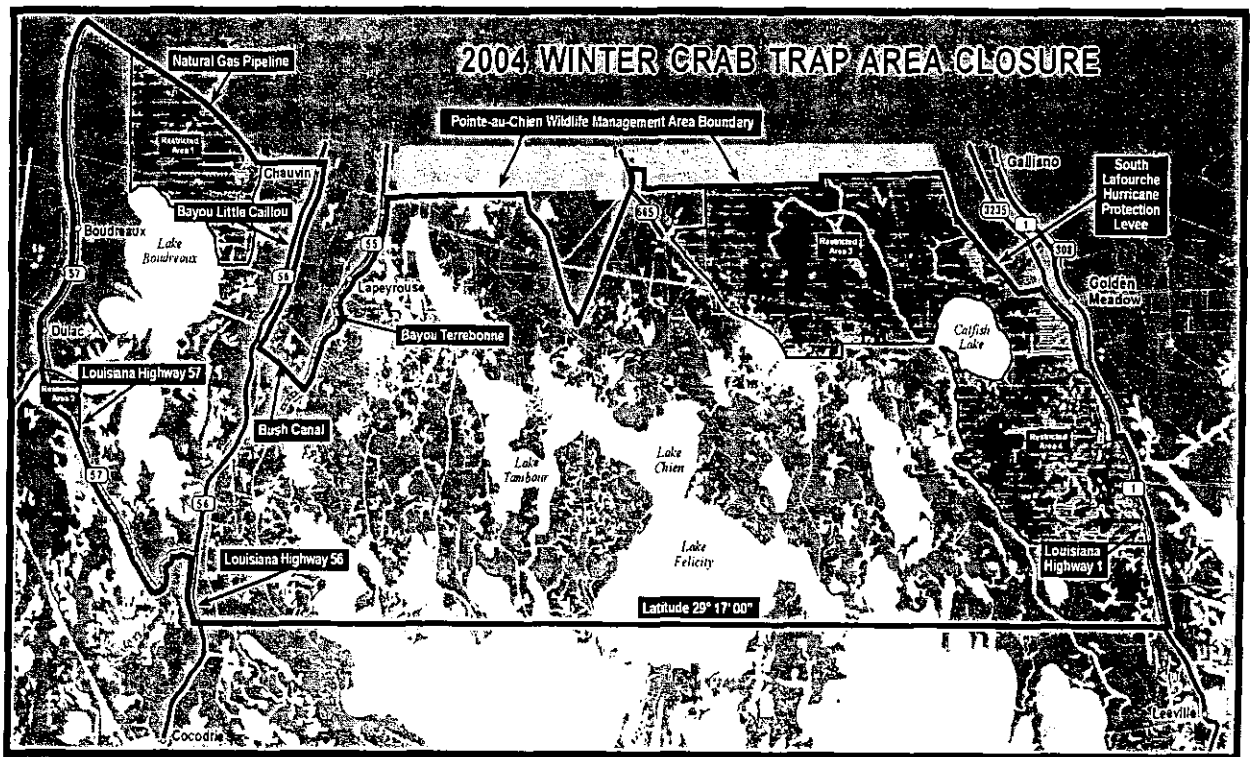
Vince Guillory

- Address: Louisiana Department of Wildlife and Fisheries; PO Box 189; Bourg, LA 70343
- Phone: (985)594-4139
- EMAIL: [guillory\\_v@wlf.state.la.us](mailto:guillory_v@wlf.state.la.us)

### Closure Area Map and Boundaries

The closure area is bounded by the following:

- from a point originating at the southern boundary of the Pointe au Chenes Wildlife Management Area at the South Lafourche Hurricane Protection Levee,
- thence west along the southern boundary of the Pointe aux Chenes Wildlife Management Area to the Humble Canal,
- thence west along the northern shoreline of Humble Canal to its intersection with Bayou Terrebonne,
- thence south along the western shoreline of Bayou Terrebonne to its intersection with Bush Canal,
- thence west along the northern shoreline of Bush Canal to its intersection with Bayou Little Caillou,
- thence north along the eastern shoreline of Bayou Little Caillou to the Gulf South / South Coast Natural Gas Pipeline in Chauvin,
- thence northwest along the Gulf South / South Coast Natural Gas Pipeline to LA Highway 57,
- thence south and then southeast along LA Highway 57 to its intersection with LA Highway 56,
- thence south along LA Highway 56 to latitude 29 degrees 17 minutes 00 seconds N,
- thence east along latitude 29 degrees 17 minutes 00 seconds N to LA Highway 1,
- thence north along LA Highway 1 to the South Lafourche Hurricane Protection Levee,
- thence north along the South Lafourche Hurricane Protection Levee and terminating at the southern boundary of the Pointe aux Chenes Wildlife Management Area.





The boundaries of the trap closure area are well defined except for a portion of the southern boundary between Highway 56 (Bayou Little Caillou) and Highway 1 (Bayou Lafourche); orange-painted PVC pipe will be placed at strategic locations along this boundary. GPS units are also suggested to delineate the boundary.

Larger, more detailed maps that show the restricted areas will be available at the disposal sites or at the derelict crab trap web site. Restricted areas within the closure area include:

1. Restricted Area 1 - Apache Louisiana Minerals, Inc. property to the north and east of Lake Boudreaux; within this area Bayou Chauvin is state owned.
2. Restricted Area 2 - Harry Bourg Corporation property north and south of Bayou Dulac; within this area Bayou Dulac is state owned.
3. Restricted Area 3 - Louisiana Land and Exploration Company property east of Bayou Pointe aux Chenes and south of the Pointe aux Chenes Wildlife Management Area boundary to Apache Louisiana Minerals, Inc. property; within this area Catfish Lake, Grand Bayou, Grand Bayou Blue, Bayou Salle, Bayou Bouillon, Bayou Faleau, Bayou Blue, and Bayou Monnaie are state owned. Volunteers using Josh's Marina are allowed to access Catfish Lake through Louisiana Land and Exploration property.
4. Restricted Area 4 - Apache Louisiana Minerals, Inc. property east of Grand Bayou Blue and south of Catfish Lake to the Louisiana Land and Exploration Company property north of Laurier Bay.

**Source:** Derelict Crab Trap Removal Program Web site, [www.blue-crab.net/derelict.html](http://www.blue-crab.net/derelict.html).

# LOUISIANA'S DERELICT CRAB TRAP REMOVAL PROGRAM

## BACKGROUND INFORMATION

Crab Traps

Derelict Traps

Legislation / Administrative  
Process

Programs In Other States

## LOUISIANA'S PROGRAM

Winter Closure Regulations

Spring Closure Regulations

Area/Time Justifications

Project Plans

Program Needs

## VOLUNTEER INFORMATION

Terrebonne Bay Winter  
Closure

Vermilion Bay Spring Closure  
Data Collection Form

## INTERNET LINKS

Louisiana News: [1] [2]

GSMFC Derelict Trap Page

Ghost Traps, Shallow Water  
Angler

Alabama Program

Florida Program Rules

## NEWS AND ANNOUNCEMENTS

Volunteer Information:  
Terrebonne Bay Winter  
Closure

Welcome to the Louisiana Derelict Crab Trap Removal Program Web Site. The lead agency for the derelict trap removal program will be the Louisiana Department of Wildlife and Fisheries (LDWF). However, many other organizations, government intities, and individuals are expected to participate. The trap removal program will be patterned after successful trap removal programs in Texas, Mississippi, and Alabama.

If you would you like additional information, please contact Vince Guillory by phone [985-594-4139], mail [Louisiana Department of Wildlife and Fisheries; PO Box 189; Bourg, LA 70343], or EMAIL [[guillory\\_v@wlf.state.la.us](mailto:guillory_v@wlf.state.la.us)].

## ACKNOWLEDGEMENTS

The 2004 derelict crab trap removal program would not be possible without the support and assistance of many institutions, organizations, and individuals:

### Funding

- NOAA Habitat Restoration Center for providing federal funds
- The crab industry for dedicating leftover monies from a Section 201 petition to Louisiana's derelict crab trap removal program
- The Gulf States Marine Fisheries Commission for coordinating the gulfwide federal aid derelict crab trap removal project

Landowners-- For allowing volunteers volunteers access to private property to collect derlict crab traps.

- Apache Louisiana Minerals Inc.
- Burlington Resources

### Planning and Support

- Barataria-Terrebonne National Estuary Program
- Crab Task Force
- Coastal Conservation Association
- Louisiana Wildlife Federation
- LSU Sea Grant

**Volunteer Information:**  
**Vermilion Bay Winter**  
**Closure**

**DISPOSAL SITES:** The designated disposal sites were announced on the Department of Wildlife and Fisheries [web site](#).

**WWL RADIO APPEARANCE:** On Thursday night, January 29, on the Don Dubuc Outdoor Show, the derelict crab trap program will be discussed.

**NUMBER OF VISITORS =**  
**368**

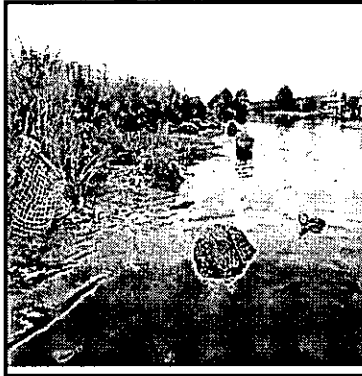
**[BLUE CRAB HOME PAGE]**

- **LSU Cooperative Extension Service**

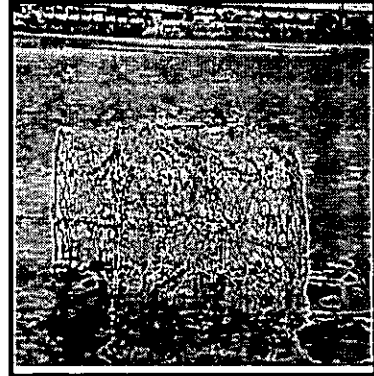
**Trap Collection**

- **The wonderful volunteers!**

**DERELICT TRAPS**



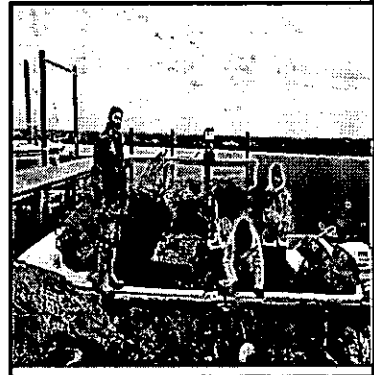
**DERELICT TRAP**



**RETRIEVING TRAPS**



**UNLOADING TRAPS**



## **Hawkins-Falcon, Susan**

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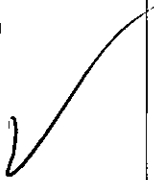
**From:** Courtney, Joel  
**Sent:** Monday, February 09, 2004 8:43 AM  
**To:** Hawkins-Falcon, Susan  
**Subject:** Commission Meeting Information numbers

Information and Resource Library numbers  
2, 531 visitors

Information Request:  
Email 566  
Phone 373  
Standard Mail 88

Reception Desk (front desk)

Phone calls logged: 8, 545  
Visitors logged: 3, 879

| Sunday    | Monday | Tuesday  | Wednesday | Thursday | Friday | Saturday |
|-----------|--------|--|-----------|----------|--------|----------|
| June 2004 |        |  |           |          |        |          |
|           |        | 1  | 2         | 3        | 4      | 5        |
| 6         | 7      | 8<br> | 9         | 10       | 11     | 12       |
| 13        | 14     | 15   | 16        | 17       | 18     | 19       |
| 20        | 21     | 22   | 23        | 24       | 25     | 26       |
| 27        | 28     | 29   | 30        |          |        |          |

SCHEDULE FOR FINAL RULES TO BE PUBLISHED IN STATE REGISTER

JAN-04

RULE - Removal of Abandoned Crab Traps

MAY-04

RULE - Spotted Seatrout Management Measures

RULE - Public Oyster Seed Ground Addition -  
Lake Borgne

## MONTHLY CIVIL RESTITUTION REPORT

| PERIOD                | NO. CASES<br>ASSESSED | AMOUNT<br>ASSESSED | CREDIT FOR<br>SALE GOODS | NO. CASES<br>PAID | AMOUNT<br>PAID | DISCOUNTS<br>TAKEN | PERCENT<br>DOLLARS PAID | PERCENT<br>CASES PAID |
|-----------------------|-----------------------|--------------------|--------------------------|-------------------|----------------|--------------------|-------------------------|-----------------------|
| FISCAL YEAR 1993-94   |                       |                    |                          |                   |                |                    |                         |                       |
| July, 1993            | 25                    | \$21,039.00        | (\$9,778.00)             | 29                | \$4,855.00     | \$2,545.00         |                         |                       |
| Aug., 1993            | 53                    | \$44,922.00        | (\$1,137.00)             | 41                | \$7,950.00     | \$3,603.00         |                         |                       |
| Sept., 1993           | 42                    | \$137,635.00       | (\$17,938.00)            | 35                | \$6,783.00     | \$3,048.00         |                         |                       |
| Oct., 1993            | 49                    | \$21,471.00        | (\$11,282.00)            | 40                | \$3,285.00     | \$1,519.00         |                         |                       |
| Nov., 1993            | 57                    | \$31,207.00        | (\$13,260.00)            | 32                | \$3,053.00     | \$2,845.00         |                         |                       |
| Dec., 1993            | 53                    | \$13,777.00        |                          | 27                | \$6,507.00     | \$6,713.00         |                         |                       |
| Jan., 1994            | 38                    | \$18,918.00        |                          | 32                | \$4,423.00     | \$2,831.00         |                         |                       |
| Feb., 1994            | 68                    | \$38,131.00        | (\$8,238.00)             | 46                | \$9,124.00     | \$5,993.00         |                         |                       |
| Mar., 1994            | 38                    | \$22,739.00        | (\$2,482.00)             | 51                | \$10,854.00    | \$6,796.00         |                         |                       |
| April, 1994           | 14                    | \$44,732.00        | (\$1,404.00)             | 27                | \$7,307.00     | \$4,632.00         |                         |                       |
| May, 1994             | 10                    | \$4,504.00         | (\$165.00)               | 7                 | \$5,447.00     | \$3,808.00         |                         |                       |
| June, 1994            | 29                    | \$26,167.00        | (\$2,986.00)             | 12                | \$1,886.00     | \$1,214.00         |                         |                       |
| Total FY 1994         | 476                   | \$425,242.00       | (\$68,670.00)            | 379               | \$71,474.00    | \$45,547.00        | 27.5%                   | 79.6%                 |
| FISCAL YEAR 1994-95   |                       |                    |                          |                   |                |                    |                         |                       |
| July, 1994            | 17                    | \$2,127.00         | (\$335.00)               | 23                | \$2,101.00     | \$1,437.00         |                         |                       |
| Aug., 1994            | 41                    | \$96,403.00        | (\$3,035.00)             | 20                | \$1,010.00     | \$605.00           |                         |                       |
| Sept., 1994           | 34                    | \$14,614.00        | (\$14,002.00)            | 26                | \$2,596.00     | \$2,342.00         |                         |                       |
| Oct., 1994            | 94                    | \$17,426.00        | (\$8,677.00)             | 38                | \$2,922.00     | \$3,179.00         |                         |                       |
| Nov., 1994            | 43                    | \$103,592.00       |                          | 45                | \$3,992.00     | \$2,803.00         |                         |                       |
| Dec., 1994            | 68                    | \$31,400.00        |                          | 35                | \$4,315.00     | \$2,329.00         |                         |                       |
| Jan., 1995            | 55                    | \$27,601.00        |                          | 52                | \$7,493.00     | \$4,921.00         |                         |                       |
| Feb., 1995            | 70                    | \$61,119.00        |                          | 41                | \$6,472.00     | \$3,973.00         |                         |                       |
| Mar., 1995            | 31                    | \$25,072.00        |                          | 44                | \$8,315.00     | \$4,737.00         |                         |                       |
| Apr., 1995            | 13                    | \$15,353.00        |                          | 16                | \$3,565.00     | \$1,538.00         |                         |                       |
| May., 1995            | 23                    | \$11,632.00        |                          | 16                | \$4,315.00     | \$654.00           |                         |                       |
| June 1995             | 45                    | \$31,008.00        |                          | 18                | \$2,630.00     | \$1,025.00         |                         |                       |
| Total FY 1995         | 534                   | \$437,347.00       | (\$26,049.00)            | 374               | \$49,726.00    | \$29,543.00        | 18.1%                   | 70.0%                 |
| FISCAL YEAR 1995-96   |                       |                    |                          |                   |                |                    |                         |                       |
| July, 1995            | 0                     | \$0.00             |                          |                   |                |                    |                         |                       |
| Aug., 1995            | 46                    | \$17,425.00        |                          | 27                | \$9,028.00     | \$1,729.00         |                         |                       |
| Sept., 1995           | 1                     | \$125.00           |                          | 21                | \$3,093.00     | \$2,049.00         |                         |                       |
| Oct., 1995            | 122                   | \$206,244.00       |                          | 29                | \$2,720.00     | \$1,161.00         |                         |                       |
| Nov., 1995            | 55                    | \$23,124.00        |                          | 62                | \$10,151.00    | \$6,383.00         |                         |                       |
| Dec., 1995            | 50                    | \$18,607.26        |                          | 32                | \$4,780.66     | \$2,802.76         |                         |                       |
| Jan., 1996            | 49                    | \$13,814.88        | (\$15,296.45)            | 36                | \$5,296.51     | \$3,472.89         |                         |                       |
| Feb., 1996            | 50                    | \$14,716.97        |                          | 38                | \$5,777.53     | \$3,416.91         |                         |                       |
| Mar., 1996            | 33                    | \$24,936.91        |                          | 36                | \$6,035.12     | \$3,421.75         |                         |                       |
| Apr., 1996            | 30                    | \$11,006.66        |                          | 36                | \$7,173.12     | \$2,711.54         |                         |                       |
| May., 1996            | 23                    | \$7,989.34         |                          | 24                | \$3,941.69     | \$2,020.29         |                         |                       |
| June 1996             | 50                    | \$22,151.31        |                          | 16                | \$2,790.02     | \$1,182.23         |                         |                       |
| Total FY 1996         | 509                   | \$360,141.33       | (\$15,296.45)            | 357               | \$60,786.65    | \$30,350.37        | 25.3%                   | 70.1%                 |
| FISCAL YEAR 1996-97   |                       |                    |                          |                   |                |                    |                         |                       |
| July, 1996            | 40                    | \$71,894.13        |                          | 32                | \$5,249.93     | \$2,947.96         |                         |                       |
| Aug., 1996            | 32                    | \$5,362.64         |                          | 32                | \$6,254.59     | \$3,783.69         |                         |                       |
| Sept., 1996           | 41                    | \$7,210.00         |                          | 29                | \$2,259.96     | \$1,326.58         |                         |                       |
| Oct., 1996            | 29                    | \$11,092.53        |                          | 25                | \$3,697.89     | \$2,261.98         |                         |                       |
| Nov., 1996            | 20                    | \$10,009.10        |                          | 22                | \$1,624.63     | \$698.02           |                         |                       |
| Dec., 1996            | 13                    | \$238,466.04       |                          | 22                | \$5,877.18     | \$2,121.53         |                         |                       |
| Jan., 1997            | 27                    | \$11,755.22        |                          | 17                | \$4,393.30     | \$2,377.09         |                         |                       |
| Feb., 1997            | 47                    | \$18,520.87        |                          | 42                | \$8,579.84     | \$5,552.63         |                         |                       |
| Mar., 1997            | 26                    | \$13,434.02        |                          | 27                | \$4,999.59     | \$2,757.67         |                         |                       |
| Apr., 1997            | 10                    | \$2,908.87         |                          | 15                | \$2,322.88     | \$1,298.66         |                         |                       |
| May., 1997            | 20                    | \$11,682.70        |                          | 15                | \$5,198.91     | \$1,399.21         |                         |                       |
| June 1997             | 5                     | \$8,036.58         |                          | 10                | \$2,335.24     | \$765.34           |                         |                       |
| Total FY 1997         | 310                   | \$410,372.70       | \$0.00                   | 288               | \$52,793.94    | \$27,290.36        | 19.5%                   | 92.9%                 |
| FISCAL YEAR 1997 - 98 |                       |                    |                          |                   |                |                    |                         |                       |
| July, 1997            | 10                    | \$2,811.71         |                          | 8                 | \$1,584.67     | \$823.11           |                         |                       |
| Aug., 1997            | 14                    | \$8,741.30         |                          | 8                 | \$1,496.49     | \$779.14           |                         |                       |
| Sept., 1997           | 29                    | \$19,926.37        |                          | 12                | \$2,051.78     | \$1,278.04         |                         |                       |
| Oct., 1997            | 12                    | \$4,716.81         |                          | 23                | \$3,184.83     | \$2,063.89         |                         |                       |
| Nov., 1997            | 23                    | \$54,965.34        |                          | 10                | \$2,424.86     | \$1,218.28         |                         |                       |
| Dec., 1997            | 25                    | \$36,881.09        |                          | 15                | \$4,376.97     | \$2,775.66         |                         |                       |
| Jan., 1998            | 42                    | \$30,025.81        |                          | 17                | \$5,300.40     | \$3,533.66         |                         |                       |
| Feb., 1998            | 37                    | \$31,164.95        |                          | 29                | \$22,961.69    | \$8,501.18         |                         |                       |
| Mar., 1998            | 9                     | \$13,273.45        |                          | 32                | \$9,406.56     | \$4,371.53         |                         |                       |

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|                       |     |              |             |     |             |             |       |       |
|-----------------------|-----|--------------|-------------|-----|-------------|-------------|-------|-------|
| Apr., 1998            | 10  | \$5,628.21   |             | 10  | \$2,602.62  | \$1,279.77  |       |       |
| May., 1998            | 0   | \$225.00     |             | 8   | \$2,885.02  | \$950.46    |       |       |
| June 1998             | 5   | \$2,414.03   |             | 6   | \$1,041.54  | \$98.00     |       |       |
| Total FY 1998         | 216 | \$210,774.07 | \$0.00      | 178 | \$59,317.43 | \$27,672.72 | 41.3% | 82.4% |
| FICAL YEAR 1998 - 99  |     |              |             |     |             |             |       |       |
| July, 1998            | 9   | \$1,390.43   |             | 8   | \$1,964.20  | \$716.75    |       |       |
| Aug., 1998            | 10  | \$2,240.70   |             | 10  | \$1,048.28  | \$372.47    |       |       |
| Sept., 1998           | 8   | \$2,768.96   |             | 11  | \$2,000.36  | \$1,148.23  |       |       |
| Oct., 1998            | 22  | \$28,704.85  |             | 14  | \$1,860.17  | \$807.48    |       |       |
| Nov., 1998            | 19  | \$9,137.79   |             | 11  | \$1,765.97  | \$1,092.43  |       |       |
| Dec., 1998            | 23  | \$11,959.10  |             | 27  | \$4,441.02  | \$2,040.71  |       |       |
| Jan., 1999            | 41  | \$21,179.55  |             | 18  | \$6,621.63  | \$3,838.22  |       |       |
| Feb., 1999            | 45  | \$26,236.24  |             | 41  | \$12,119.09 | \$6,923.61  |       |       |
| Mar., 1999            | 15  | \$7,549.57   |             | 33  | \$8,281.77  | \$4,138.44  |       |       |
| Apr., 1999            | 9   | \$8,013.54   |             | 14  | \$3,035.82  | \$1,388.41  |       |       |
| May., 1999            | 5   | \$5,161.23   |             | 5   | \$905.50    | \$405.00    |       |       |
| June 1999             | 7   | \$3,719.01   |             | 13  | \$3,011.06  | \$533.83    |       |       |
| Total FY 1999         | 213 | \$128,060.97 | \$0.00      | 205 | \$47,054.87 | \$23,405.58 | 55.0% | 96.2% |
| FISCAL YEAR 1999-2000 |     |              |             |     |             |             |       |       |
| July, 1999            | 5   | \$1,556.38   |             | 9   | \$2,287.53  | \$1,198.81  |       |       |
| Aug., 1999            | 10  | \$2,510.83   |             | 15  | \$2,455.38  | \$513.73    |       |       |
| Sept., 1999           | 6   | \$2,032.19   | \$5,324.80  | 28  | \$3,563.06  | \$475.93    |       |       |
| Oct., 1999            | 11  | \$4,452.31   | \$567.75    | 25  | \$2,775.48  | \$557.41    |       |       |
| Nov., 1999            | 14  | \$8,634.64   |             | 26  | \$3,250.96  | \$1,322.96  |       |       |
| Dec., 1999            | 24  | \$15,891.96  |             | 19  | \$3,862.76  | \$2,126.27  |       |       |
| Jan., 2000            | 49  | \$27,872.14  |             | 28  | \$7,952.94  | \$3,814.02  |       |       |
| Feb., 2000            | 21  | \$11,039.59  |             | 30  | \$10,159.24 | \$6,216.42  |       |       |
| Mar., 2000            | 19  | \$9,873.21   |             | 31  | \$6,709.07  | \$3,555.40  |       |       |
| Apr., 2000            | 12  | \$7,897.70   |             | 17  | \$2,932.41  | \$1,512.54  |       |       |
| May, 2000             | 7   | \$5,039.46   | \$293.60    | 20  | \$7,062.23  | \$3,164.00  |       |       |
| June, 2000            | 16  | \$14,566.88  |             | 18  | \$5,766.59  | \$1,852.12  |       |       |
| Total FY 2000         | 194 | \$111,367.29 | \$6,186.15  | 266 | \$58,777.65 | \$26,309.61 | 76%   | 137%  |
| FISCAL YEAR 2000-01   |     |              |             |     |             |             |       |       |
| July, 2000            | 2   | \$865.01     |             | 14  | \$1,948.03  | \$154.01    |       |       |
| Aug., 2000            | 20  | \$15,837.60  |             | 17  | \$3,302.27  | \$1,063.92  |       |       |
| Sept., 2000           | 12  | \$3,562.26   |             | 23  | \$8,718.21  | \$1,351.41  |       |       |
| Oct., 2000            | 18  | \$122,696.24 |             | 29  | \$7,457.98  | \$490.16    |       |       |
| Nov., 2000            | 13  | \$15,851.30  |             | 22  | \$4,038.50  | \$309.30    |       |       |
| Dec., 2000            | 40  | \$30,234.92  |             | 24  | \$7,189.98  | \$462.13    |       |       |
| Jan., 2001            | 28  | \$15,923.38  |             | 25  | \$7,611.66  | \$833.60    |       |       |
| Feb., 2001            | 35  | \$20,181.39  |             | 30  | \$18,568.12 | \$1,917.82  |       |       |
| Mar., 2001            | 8   | \$5,956.83   |             | 37  | \$15,724.02 | \$753.86    |       |       |
| Apr., 2001            | 20  | \$24,145.82  |             | 22  | \$4,856.39  | \$225.93    |       |       |
| May 2001              | 4   | \$1,677.36   |             | 20  | \$3,700.77  | \$313.58    |       |       |
| June 2001             | 3   | \$932.20     |             | 31  | \$8,433.81  | \$346.90    |       |       |
| Total FY 2001         | 203 | \$257,864.31 | \$0.00      | 294 | \$91,549.74 | \$8,222.62  | 39%   | 145%  |
| FISCAL YEAR 2001-02   |     |              |             |     |             |             |       |       |
| July, 2001            | 4   | \$4,290.29   |             | 25  | \$6,328.36  | \$293.54    |       |       |
| Aug., 2001            | 6   | \$9,452.69   |             | 18  | \$2,984.52  |             |       |       |
| Sept., 2001           | 0   | \$475.00     |             | 25  | \$4,157.32  | \$66.29     |       |       |
| Oct., 2001            | 15  | \$6,439.06   |             | 18  | \$3,174.66  | \$67.32     |       |       |
| Nov., 2001            | 15  | \$5,913.63   |             | 24  | \$3,932.41  | \$194.66    |       |       |
| Dec., 2001            | 36  | \$21,868.88  |             | 20  | \$5,384.19  | \$502.17    |       |       |
| Jan., 2002            | 56  | \$27,650.44  |             | 38  | \$11,100.99 | \$1,008.09  |       |       |
| Feb., 2002            | 27  | \$14,211.31  | \$620.55    | 37  | \$20,017.87 | \$861.63    |       |       |
| Mar., 2002            | 8   | \$6,765.68   |             | 36  | \$10,061.89 | \$419.16    |       |       |
| Apr., 2002            | 20  | \$11,296.19  |             | 19  | \$2,196.02  | \$49.33     |       |       |
| May, 2002             | 3   | \$30,852.57  | \$11,887.80 | 27  | \$8,265.67  | \$538.72    |       |       |
| June, 2002            | 3   | \$8,636.08   |             | 23  | \$3,418.15  | \$87.91     |       |       |
| Total FY 2002         | 193 | \$147,551.82 | \$12,508.35 | 310 | \$81,022.05 | \$4,088.82  | 58%   | 161%  |
| FISCAL YEAR 2002-03   |     |              |             |     |             |             |       |       |
| July, 2002            | 8   | \$6,915.26   |             | 20  | \$3,308.14  | \$111.90    |       |       |
| Aug., 2002            | 12  | \$11,943.66  |             | 24  | \$4,010.98  | \$47.33     |       |       |
| Sept., 2002           | 6   | \$1,944.83   |             | 19  | \$4,624.36  | \$85.25     |       |       |
| Oct., 2002            | 24  | \$12,167.99  |             | 25  | \$7,131.20  | \$442.95    |       |       |
| Nov., 2002            | 21  | \$11,013.41  |             | 27  | \$8,688.51  | \$624.99    |       |       |
| Dec., 2002            | 32  | \$15,763.99  |             | 23  | \$7,660.18  | \$689.95    |       |       |





LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CIVIL RESTITUTION ACTIVITY REPORT  
CURRENT MONTH  
01/01/2004 TO 01/31/2004

|                                 | # CASES | AMOUNT      |
|---------------------------------|---------|-------------|
| ORIG RESTITUTION VALUES ENTERED | 32      | \$17,459.03 |
| HEARING COSTS ASSESSED          | 6       | \$150.00    |
| SALE OF CONFISCATED COMMODS     | 0       | \$0.00      |
| SALES EXCEEDING RESTITUTION     | 0       | \$0.00      |
| =====                           |         |             |
| RESTITUTION ASSESSED            | 32      | \$17,609.03 |
| PAYMENTS                        | 20      | \$6,961.24- |
| PAYMENTS AFTER PAST DUE NOTICE  | 0       | \$0.00      |
| PAYMENTS AFTER REVOKED NOTICE   | 2       | \$55.00-    |
| PAYMENTS FROM COLLECTION EFFORT | 0       | \$0.00      |
| PAYMENTS FROM HRG COST ASSESSED | 0       | \$0.00      |
| DISCOUNTS FOR TIMELY PAYMENTS   | 15      | \$685.11-   |
| OVERPAYMENTS                    | 1       | \$0.34      |
| REFUND OF OVERPAYMENT           | 0       | \$0.00      |
| APPLIED CONFISCATED COMMODS     | 0       | \$0.00      |
| APPLIED EXCEEDING BALANCE DUE   | 0       | \$0.00      |
| REFUND OF CONFISCATED COMMOD.   | 0       | \$0.00      |
| RETURNED CHECKS                 | 0       | \$0.00      |
| MISC. ADJUSTMENTS               |         |             |
| DEBITS                          | 0       | \$0.00      |
| CREDITS                         | 0       | \$0.00      |
| REASSESSMENTS                   |         |             |
| DEBITS                          | 0       | \$0.00      |
| CREDITS                         | 0       | \$0.00      |
| WRITE-OFFS                      | 0       | \$0.00      |
| ASSESSMENTS WITHDRAWN           | 0       | \$0.00      |
| ADJUDICATION ADJUSTMENTS        | 4       | \$0.00      |
| FOUND NOT RESPONSIBLE           | 0       | \$0.00      |
| DISMISSED BY D.A.               | 0       | \$0.00      |
| CASES VOIDED BY ENFORCEMENT     | 0       | \$0.00      |
| OVERTURNED ON APPEAL            | 0       | \$0.00      |
| DISMISSED BY ADMIN LAW          | 1       | \$524.54-   |

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FOOTNOTE:

|                                |   |        |
|--------------------------------|---|--------|
| FORFEIT OF CONFISCATED COMMODS | 0 | \$0.00 |
|--------------------------------|---|--------|

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CIVIL RESTITUTION ACTIVITY REPORT  
FISCAL YEAR TO DATE  
07/01/2003 TO 01/31/2004

|                                 | # CASES | AMOUNT       |
|---------------------------------|---------|--------------|
| ORIG RESTITUTION VALUES ENTERED | 141     | \$82,260.40  |
| HEARING COSTS ASSESSED          | 60      | \$1,500.00   |
| SALE OF CONFISCATED COMMODS     | 0       | \$0.00       |
| SALES EXCEEDING RESTITUTION     | 0       | \$0.00       |
| =====                           |         |              |
| RESTITUTION ASSESSED            | 141     | \$83,760.40  |
| PAYMENTS                        | 95      | \$33,422.87- |
| PAYMENTS AFTER PAST DUE NOTICE  | 0       | \$0.00       |
| PAYMENTS AFTER REVOKED NOTICE   | 8       | \$1,265.73-  |
| PAYMENTS FROM COLLECTION EFFORT | 6       | \$1,935.70-  |
| PAYMENTS FROM HRG COST ASSESSED | 15      | \$375.00-    |
| DISCOUNTS FOR TIMELY PAYMENTS   | 58      | \$2,263.94-  |
| OVERPAYMENTS                    | 8       | \$2.81       |
| REFUND OF OVERPAYMENT           | 6       | \$554.16     |
| APPLIED CONFISCATED COMMODS     | 0       | \$0.00       |
| APPLIED EXCEEDING BALANCE DUE   | 0       | \$0.00       |
| REFUND OF CONFISCATED COMMOD.   | 0       | \$0.00       |
| RETURNED CHECKS                 | 0       | \$0.00       |
| MISC. ADJUSTMENTS               |         |              |
| DEBITS                          | 0       | \$0.00       |
| CREDITS                         | 0       | \$0.00       |
| REASSESSMENTS                   |         |              |
| DEBITS                          | 0       | \$0.00       |
| CREDITS                         | 2       | \$1,605.00-  |
| WRITE-OFFS                      | 1       | \$274.77-    |
| ASSESSMENTS WITHDRAWN           | 2       | \$2,922.61-  |
| ADJUDICATION ADJUSTMENTS        | 5       | \$0.91-      |
| FOUND NOT RESPONSIBLE           | 2       | \$1,049.08-  |
| DISMISSED BY D.A.               | 0       | \$0.00       |
| CASES VOIDED BY ENFORCEMENT     | 0       | \$0.00       |
| OVERTURNED ON APPEAL            | 0       | \$0.00       |
| DISMISSED BY ADMIN LAW          | 2       | \$1,376.69-  |
| -----                           |         |              |
| FOOTNOTE:                       |         |              |
| FORFEIT OF CONFISCATED COMMODS  | 0       | \$0.00       |

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CIVIL RESTITUTION ACTIVITY REPORT  
INCEPTION TO DATE  
01/31/2004

|                                 | # CASES | AMOUNT          |
|---------------------------------|---------|-----------------|
| ORIG RESTITUTION VALUES ENTERED | 4,776   | \$3,315,873.00  |
| HEARING COSTS ASSESSED          | 436     | \$11,450.00     |
| SALE OF CONFISCATED COMMODS     | 331     | \$269,865.45-   |
| SALES EXCEEDING RESTITUTION     | 138     | \$58,209.82     |
| =====                           |         |                 |
| RESTITUTION ASSESSED            | 4,776   | \$3,115,667.37  |
| PAYMENTS                        | 3,220   | \$725,730.36-   |
| PAYMENTS AFTER PAST DUE NOTICE  | 33      | \$8,624.04-     |
| PAYMENTS AFTER REVOKED NOTICE   | 86      | \$32,849.55-    |
| PAYMENTS FROM COLLECTION EFFORT | 33      | \$25,381.92-    |
| PAYMENTS FROM HRG COST ASSESSED | 212     | \$5,500.00-     |
| DISCOUNTS FOR TIMELY PAYMENTS   | 2,252   | \$263,776.22-   |
| OVERPAYMENTS                    | 136     | \$98.02         |
| REFUND OF OVERPAYMENT           | 70      | \$12,392.02     |
| APPLIED CONFISCATED COMMODS     | 17      | \$44,255.65-    |
| APPLIED EXCEEDING BALANCE DUE   | 5       | \$6,780.54      |
| REFUND OF CONFISCATED COMMOD.   | 8       | \$45,896.70     |
| RETURNED CHECKS                 | 1       | \$61.75         |
| MISC. ADJUSTMENTS               |         |                 |
| DEBITS                          | 3       | \$55.00         |
| CREDITS                         | 13      | \$10.22-        |
| REASSESSMENTS                   |         |                 |
| DEBITS                          | 21      | \$6,881.15      |
| CREDITS                         | 66      | \$38,666.90-    |
| WRITE-OFFS                      | 1,058   | \$1,480,878.11- |
| ASSESSMENTS WITHDRAWN           | 9       | \$4,717.56-     |
| ADJUDICATION ADJUSTMENTS        | 36      | \$21,075.49-    |
| FOUND NOT RESPONSIBLE           | 93      | \$170,105.37-   |
| DISMISSED BY D.A.               | 1       | \$2,134.47-     |
| CASES VOIDED BY ENFORCEMENT     | 2       | \$559.32-       |
| OVERTURNED ON APPEAL            | 1       | \$524.54-       |
| DISMISSED BY ADMIN LAW          | 2       | \$7,414.87-     |
| =====                           |         |                 |
| ** TOTAL OUTSTANDING            | 313     | \$355,627.96    |

## FOOTNOTE:

|                                |    |                |
|--------------------------------|----|----------------|
| FORFEIT OF CONFISCATED COMMODS | 38 | \$106,941.70 * |
|--------------------------------|----|----------------|

## AGING OF SALE OF CONFISCATED COMMODITIES

|                        |     |              |
|------------------------|-----|--------------|
| VIOLATION DATE UNKNOWN | 0   | \$0.00       |
| 1 - 30 DAYS            | 0   | \$0.00       |
| 31 - 60 DAYS           | 1   | \$7,443.90   |
| 61 - 90 DAYS           | 4   | \$8,430.35   |
| 91 - 120 DAYS          | 4   | \$1,772.66   |
| 121 - 150 DAYS         | 14  | \$24,431.64  |
| 151 - 180 DAYS         | 12  | \$3,328.44   |
| 181 - 365 DAYS         | 35  | \$22,692.75  |
| OVER ONE YEAR          | 59  | \$58,932.09  |
| OVER TWO YEARS         | 109 | \$97,898.31  |
| OVER THREE YEARS       | 978 | \$682,460.79 |

=====

|                |       |              |
|----------------|-------|--------------|
| ** TOTAL AGING | 1,216 | \$907,390.93 |
|----------------|-------|--------------|

## AGING OF OUTSTANDING CASES

## COLLECTIONS WITH AGENCY:

|                     |    |              |
|---------------------|----|--------------|
| CAN NOT BE INVOICED | 1  | \$214.64     |
| CURRENT             | 28 | \$15,670.77  |
| 1 - 30 DAYS         | 29 | \$14,128.90  |
| 31 - 90 DAYS        | 9  | \$8,334.98   |
| 91 - 180 DAYS       | 15 | \$18,454.76  |
| 181 - 365 DAYS      | 38 | \$22,158.71  |
| OVER ONE YEAR       | 99 | \$102,604.58 |

## COLLECTIONS WITH PRIVATE COLLECTIONS FIRM:

|                |    |             |
|----------------|----|-------------|
| 1 - 90 DAYS    | 0  | \$0.00      |
| 91 - 180 DAYS  | 0  | \$0.00      |
| 181 - 365 DAYS | 0  | \$0.00      |
| OVER ONE YEAR  | 89 | \$85,550.52 |

## AMOUNT UNDER PROTEST:

|                |   |             |
|----------------|---|-------------|
| 1 - 180 DAYS   | 0 | \$0.00      |
| 181 - 365 DAYS | 1 | \$549.54    |
| OVER ONE YEAR  | 4 | \$87,960.56 |

=====

|                |     |              |
|----------------|-----|--------------|
| ** TOTAL AGING | 313 | \$355,627.96 |
|----------------|-----|--------------|

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CLASS I ACTIVITY REPORT  
CURRENT MONTH  
01/01/2004-01/31/2004

|               | # CASES | AMOUNT      |
|---------------|---------|-------------|
| FINES         | 303     | \$18,700.00 |
| HEARING COSTS |         |             |
| DEBITS        | 74      | \$1,850.00  |
| CREDITS       | 2       | \$75.00-    |
| LATE CHARGES  |         |             |
| DEBITS        | 89      | \$722.50    |
| CREDITS       | 0       | \$0.00      |
| =====         |         |             |
| TOTAL DUE     |         | \$21,197.50 |

=====

|                              |     |              |
|------------------------------|-----|--------------|
| PAID IN FULL                 | 218 | \$13,990.00- |
| PARTIAL PAYMENTS             | 8   | \$475.00-    |
| ATTORNEY GENERAL COLLECTIONS | 0   | \$0.00       |
| ATTORNEY GENERAL FEES        | 0   | \$0.00       |
| DEPT OF REVENUE COLLECTIONS  | 0   | \$0.00       |
| DEPT OF REVENUE FEES         | 0   | \$0.00       |
| WRITE-OFFS                   | 0   | \$0.00       |
| OVERPAYMENTS                 | 0   | \$0.00       |
| REFUNDS                      | 2   | \$77.50      |
| RETURNED CHECKS              | 0   | \$0.00       |
| MISC CHANGES                 |     |              |
| DEBITS                       | 0   | \$0.00       |
| CREDITS                      | 0   | \$0.00       |
| ADJUSTMENTS TO VIOLATION     |     |              |
| DEBITS                       | 1   | \$100.00     |
| CREDITS                      | 0   | \$0.00       |
| VOIDS                        | 10  | \$550.00-    |
| NOT GUILTY                   | 0   | \$0.00       |
| DISMISSED BY ADMIN LAW       | 1   | \$50.00-     |
| DISMISSED BY ENFORCEMENT     | 0   | \$0.00       |
| GUILTY/FINE WAIVED           | 0   | \$0.00       |
| OVERTURNED ON APPEAL         | 0   | \$0.00       |

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CLASS I ACTIVITY REPORT  
FISCAL YEAR TO DATE  
07/01/2003-01/31/2004

|               | # CASES | AMOUNT       |
|---------------|---------|--------------|
| FINES         | 4,121   | \$238,490.00 |
| HEARING COSTS |         |              |
| DEBITS        | 2,584   | \$70,007.50  |
| CREDITS       | 12      | \$550.00-    |
| LATE CHARGES  |         |              |
| DEBITS        | 888     | \$7,483.25   |
| CREDITS       | 0       | \$0.00       |
|               |         | =====        |
| TOTAL DUE     |         | \$315,430.75 |

=====

|                              |       |               |
|------------------------------|-------|---------------|
| PAID IN FULL                 | 4,009 | \$245,443.25- |
| PARTIAL PAYMENTS             | 113   | \$6,183.50-   |
| ATTORNEY GENERAL COLLECTIONS | 0     | \$0.00        |
| ATTORNEY GENERAL FEES        | 0     | \$0.00        |
| DEPT OF REVENUE COLLECTIONS  | 2     | \$77.00-      |
| DEPT OF REVENUE FEES         | 2     | \$8.00-       |
| WRITE-OFFS                   | 0     | \$0.00        |
| OVERPAYMENTS                 | 11    | \$105.50      |
| REFUNDS                      | 37    | \$1,017.50    |
| RETURNED CHECKS              | 5     | \$300.00      |
| MISC CHANGES                 |       |               |
| DEBITS                       | 5     | \$100.00      |
| CREDITS                      | 0     | \$0.00        |
| ADJUSTMENTS TO VIOLATION     |       |               |
| DEBITS                       | 7     | \$450.00      |
| CREDITS                      | 3     | \$100.00-     |
| VOIDS                        | 66    | \$3,500.00-   |
| NOT GUILTY                   | 21    | \$1,150.00-   |
| DISMISSED BY ADMIN LAW       | 14    | \$950.00-     |
| DISMISSED BY ENFORCEMENT     | 0     | \$0.00        |
| GUILTY/FINE WAIVED           | 1     | \$50.00-      |
| OVERTURNED ON APPEAL         | 0     | \$0.00        |

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES  
CLASS I ACTIVITY REPORT  
INCEPTION TO DATE  
01/31/2004

|               | # CASES | AMOUNT         |
|---------------|---------|----------------|
| FINES         | 111,520 | \$5,740,092.07 |
| HEARING COSTS |         |                |
| DEBITS        | 30,535  | \$771,470.30   |
| CREDITS       | 13      | \$11,366.00-   |
| LATE CHARGES  |         |                |
| DEBITS        | 1,576   | \$12,757.75    |
| CREDITS       | 0       | \$0.00         |
|               |         | =====          |
| TOTAL DUE     |         | \$6,512,954.12 |

=====

|                              |        |                 |
|------------------------------|--------|-----------------|
| PAID IN FULL                 | 67,926 | \$3,643,445.74- |
| PARTIAL PAYMENTS             | 1,729  | \$81,152.25-    |
| ATTORNEY GENERAL COLLECTIONS | 14     | \$690.00-       |
| ATTORNEY GENERAL FEES        | 33     | \$345.00-       |
| DEPT OF REVENUE COLLECTIONS  | 28     | \$1,745.00-     |
| DEPT OF REVENUE FEES         | 28     | \$112.00-       |
| WRITE-OFFS                   | 11,954 | \$697,352.50-   |
| OVERPAYMENTS                 | 193    | \$4,136.78      |
| REFUNDS                      | 382    | \$16,565.31     |
| RETURNED CHECKS              | 78     | \$4,125.00      |
| MISC CHANGES                 |        |                 |
| DEBITS                       | 75     | \$1,215.00      |
| CREDITS                      | 170    | \$141.88-       |
| ADJUSTMENTS TO VIOLATION     |        |                 |
| DEBITS                       | 251    | \$14,800.00     |
| CREDITS                      | 44     | \$2,500.00-     |
| VOIDS                        | 5,692  | \$286,500.00-   |
| NOT GUILTY                   | 1,231  | \$62,650.00-    |
| DISMISSED BY ADMIN LAW       | 232    | \$12,150.00-    |
| DISMISSED BY ENFORCEMENT     | 13     | \$650.00-       |
| GUILTY/FINE WAIVED           | 158    | \$7,950.00-     |
| OVERTURNED ON APPEAL         | 0      | \$0.00          |
|                              |        | =====           |
| TOTAL OUTSTANDING            |        | \$1,756,411.84  |



## AGING OF OUTSTANDING CASES FROM CITATION DATE

## COLLECTIONS WITH AGENCY:

|                |        |                |
|----------------|--------|----------------|
| CURRENT        | 184    | \$11,150.00    |
| 1 - 30 DAYS    | 197    | \$12,950.00    |
| 31 - 90 DAYS   | 499    | \$31,000.00    |
| 91 - 180 DAYS  | 880    | \$64,875.00    |
| 181 - 365 DAYS | 1,747  | \$140,937.50   |
| OVER ONE YEAR  | 18,381 | \$1,296,090.34 |

## COLLECTIONS WITH DEPT OF REVENUE:

|                |       |              |
|----------------|-------|--------------|
| 1 - 90 DAYS    | 0     | \$0.00       |
| 91 - 180 DAYS  | 0     | \$0.00       |
| 181 - 365 DAYS | 0     | \$0.00       |
| OVER ONE YEAR  | 2,501 | \$199,184.00 |

## AMOUNT UNDER PROTEST:

|                |   |          |
|----------------|---|----------|
| 1 - 180 DAYS   | 0 | \$0.00   |
| 181 - 365 DAYS | 0 | \$0.00   |
| OVER ONE YEAR  | 3 | \$225.00 |

=====

|                |        |                |
|----------------|--------|----------------|
| ** TOTAL AGING | 24,392 | \$1,756,411.84 |
|----------------|--------|----------------|

## AGING OF OUTSTANDING CASES FROM HEARING DATE

|                |        |                |
|----------------|--------|----------------|
| PREHEARING     | 1,028  | \$63,000.00    |
| 0 - 90 DAYS    | 371    | \$29,740.00    |
| 91 - 180 DAYS  | 1,002  | \$75,170.00    |
| 181 - 270 DAYS | 1,096  | \$90,812.50    |
| 271 - 365 DAYS | 427    | \$42,002.00    |
| OVER ONE YEAR  | 20,468 | \$1,455,687.34 |

=====

|                |        |                |
|----------------|--------|----------------|
| ** TOTAL AGING | 24,392 | \$1,756,411.84 |
|----------------|--------|----------------|

# State of Louisiana



**Dwight Landreneau**  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800

**Kathleen Babineaux Blanco**  
Governor

2004-015

1/27/04

## **L.W.F.C. AMENDS AGENDA FOR FEBRUARY MEETING**

The Louisiana Wildlife and Fisheries Commission announced the addition of another item to their February meeting agenda. The meeting will be held on February 5 at 10:00 a.m. at the LDWF Headquarters building in Baton Rouge. The new agenda for the meeting is as follows:

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association
5. Enforcement & Aviation Reports/January
6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead
8. Derelict Crab Trap Removal Program Presentation
9. Hunter Safety Report
10. Public Information Update Presentation
11. Set June 2004 Meeting Date
12. Public Comments
13. Adjournment

**EDITORS:** *For more information, contact Thomas Gresham at 225/765-2923 (gresham\_tp@wlf.state.la.us).*

January 27, 2004

NEWS RELEASE

APPROVED



REVISED AGENDA FOR COMMISSION MEETING

The next regular public board meeting has been scheduled by the Commission for 10:00 A.M. on Thursday, February 5, 2004, at the Wildlife and Fisheries Building, 2000 Quail Drive, Baton Rouge, LA.

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association
5. Enforcement & Aviation Reports/January
6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead
8. Derelict Crab Trap Removal Program Presentation
9. Hunter Safety Report
10. Public Information Update Presentation
11. Set June 2004 Meeting Date
12. Public Comments
13. Adjournment

## Hawkins, Susan

---

**From:** Roussel, John E  
**Sent:** Tuesday, January 27, 2004 9:49 AM  
**To:** Foote, Karen  
**Cc:** Hawkins, Susan  
**Subject:** RE: Commission addition

OK

-----Original Message-----

**From:** Foote, Karen  
**Sent:** Tuesday, January 27, 2004 9:03 AM  
**To:** Roussel, John E  
**Cc:** Hawkins, Susan  
**Subject:** Commission addition

With your ok, I'd like to request an addition to the agenda.

Derelict Crab Trap Program presentation- Vince Guillory



**Dwight Landreneau**  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800

**Kathleen Babineaux Blanco**  
Governor

2004-014

1/26/04

### **AGENDA ANNOUNCED FOR FEBRUARY MEETING OF L.W.F.C.**

The next regular public board meeting for the Louisiana Wildlife and Fisheries Commission has been scheduled for 10:00 A.M. on Thursday, February 5, 2004, at the Wildlife and Fisheries Building, 2000 Quail Drive, Baton Rouge, LA. The agenda for the meeting will be as follows:

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association
5. Enforcement & Aviation Reports/January
6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead
8. Hunter Safety Report
9. Public Information Update Presentation
10. Set June 2004 Meeting Date
11. Public Comments
12. Adjournment

**EDITORS:** For more information, contact Thomas Gresham at 225/765-2923  
([gresham\\_tp@wlf.state.la.us](mailto:gresham_tp@wlf.state.la.us)).

# State of Louisiana



Dwight Landreneau  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 26, 2004

Kathleen Babineaux Blanco  
Governor

## MEMORANDUM

TO: Chairman and Members of Commission  
FROM: Dwight Landreneau, Secretary *DL*  
SUBJECT: February Commission Meeting Agenda

The next regular Commission meeting will be held at 10:00 A.M. on Thursday, February 5, 2004, in the Louisiana Room at the Wildlife and Fisheries Building, 2000 Quail Drive, Baton Rouge, LA.

The following items will be discussed:

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association

## WINTON VIDRINE

5. Enforcement & Aviation Reports/January

## OFFICE OF FISHERIES

6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead

Page 2  
Commission Meeting  
January 26, 2004

OFFICE OF WILDLIFE

8. Hunter Safety Report

PUBLIC INFORMATION

9. Public Information Update Presentation

10. Set June 2004 Meeting Date


11. Public Comments

DL:sch

cc: Janice Lansing  
Phil Bowman  
John Roussel  
Don Puckett  
Dennis Kropog  
Ewell Smith  
Division Administrators  
Marianne Burke

January 26, 2004

NEWS RELEASE

APPROVED: 

AGENDA FOR COMMISSION MEETING

The next regular public board meeting has been scheduled by the Commission for 10:00 A.M. on Thursday, February 5, 2004, at the Wildlife and Fisheries Building, 2000 Quail Drive, Baton Rouge, LA.

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association
5. Enforcement & Aviation Reports/January
6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead
8. Hunter Safety Report
9. Public Information Update Presentation
10. Set June 2004 Meeting Date
11. Public Comments
12. Adjournment



Approved by  
Bill Busbice 1/21/2004

C O V E R



FAX

S H E E T

**To:** Bill Busbice

**Fax #:** 337-984-5333

**Subject:** Agenda

**Date:** January 21, 2004

**Pages:** 3, including this cover sheet.

**COMMENTS:**

Please let me know if the attached agenda for the February Commission Meeting is okay.  
Thanks.

From the desk of...

Susan Hawkins

La. Dept. Of Wildlife & Fisheries  
P. O. Box 98000  
Baton Rouge, LA 70898-9000

225-765-2806  
Fax: 225-765-0948

, 2004

MEMORANDUM

TO: Chairman and Members of Commission  
FROM: Dwight Landreneau, Secretary  
SUBJECT: February Commission Meeting Agenda

The next regular Commission meeting will be held at 10:00 A.M. on Thursday, February 5, 2004, in the Louisiana Room at the Wildlife and Fisheries Building, 2000 Quail Drive, Baton Rouge, LA.

The following items will be discussed:

1. Roll Call
2. Approval of Minutes of January 8, 2004
3. Commission Special Announcements
4. Recognition of Angela Capella for Receiving Outstanding Service to Informal Science Education Award by Louisiana Science Teachers Association

WINTON VIDRINE

5. Enforcement & Aviation Reports/January

OFFICE OF FISHERIES

6. Notice of Intent - Shark Harvest Regulations
7. Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead

Page 2  
Commission Meeting  
, 2004

OFFICE OF WILDLIFE

8. Hunter Safety Report

PUBLIC INFORMATION

9. Public Information Update Presentation
10. Set June 2004 Meeting Date
11. Public Comments

JHJ:sch

cc: Janice Lansing  
Phil Bowman  
John Roussel  
Don Puckett  
Dennis Kropog  
Ewell Smith  
Division Administrators  
Marianne Burke

# State of Louisiana



James H. Jenkins, Jr.  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 5, 2004

M.J. "Mike" Foster, Jr.  
Governor

## MEMORANDUM

TO: Undersecretary, Assistant Secretary-Office of Wildlife  
and Assistant Secretary-Office of Fisheries

FROM: James H. Jenkins, Jr., Secretary

SUBJECT: Commission Meeting Agenda - February 5, 2004

Please write on the bottom of this memo and return to Susan Hawkins by Friday, January 16th any agenda items your office may have for the **Thursday, February 5th** Commission Meeting to be held in Baton Rouge, Louisiana, at the Wildlife and Fisheries Building, 2000 Quail Drive. This meeting will begin at 10:00 a.m. on February 5th. If you do not have anything for the agenda, please return memo and indicate so on the bottom of this memo. We cannot add anything to the agenda that requires commission action after we have published the agenda in the state journal.

Resolutions and Notices of Intent should be included with the list of items to be placed on the agenda. Thank you for your cooperation!

JHJ/sch

cc: Commissioners  
Don Puckett  
Winton Vidrine  
Tommy Prickett ✓  
Bennie Fontenot  
Karen Foote  
Wynnette Kees  
Brandt Savoie  
Ewell Smith  
Marianne Burke

*Division Report - John Higgins Hunter Society  
Recognition - Angela Lapelle <sup>received</sup> ~~awarded~~ ~~to~~ ~~James~~  
Outstanding Service to Informal  
Science Education award by  
La. Science Teachers Assoc.*

# State of Louisiana



James H. Jenkins, Jr.  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 5, 2004

M.J. "Mike" Foster, Jr.  
Governor

## MEMORANDUM

TO: Undersecretary, Assistant Secretary-Office of Wildlife  
and Assistant Secretary-Office of Fisheries

FROM: James H. Jenkins, Jr., Secretary

SUBJECT: Commission Meeting Agenda - **February 5, 2004**

Please write on the bottom of this memo and return to Susan Hawkins by Friday, January 16th any agenda items your office may have for the **Thursday, February 5th** Commission Meeting to be held in Baton Rouge, Louisiana, at the Wildlife and Fisheries Building, 2000 Quail Drive. This meeting will begin at 10:00 a.m. on February 5th. If you do not have anything for the agenda, please return memo and indicate so on the bottom of this memo. We cannot add anything to the agenda that requires commission action after we have published the agenda in the state journal.

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JHJ/sch

cc: Commissioners  
Don Puckett  
Winton Vidrine  
Tommy Prickett  
Bennie Fontenot  
Karen Foote  
Wynnette Kees  
Brandt Savoie  
Ewell Smith  
Marianne Burke ✓

*Public Information update  
presentation*

*Mike Foster 1-15-04*

## Hawkins, Susan

---

**From:** Roussel, John E  
**Sent:** Thursday, January 08, 2004 4:19 PM  
**To:** Foote, Karen  
**Cc:** Pausina, Randy; Shepard, Joey; Hawkins, Susan; Porch, Pat  
**Subject:** RE: Feb 2004 Commission agenda items

OK

-----Original Message-----

**From:** Foote, Karen  
**Sent:** Thursday, January 08, 2004 8:28 AM  
**To:** Roussel, John E  
**Cc:** Pausina, Randy; Shepard, Joey; Hawkins, Susan; Porch, Pat  
**Subject:** Feb 2004 Commission agenda items

With your approval, Marine Fisheries requests that we place the following items on the February agenda:

Notice of Intent- Shark Harvest Regulations - Randy Pausina

(related to new federal regs on bag for certain species)

Presentation of Stock Assessments for Black Drum, Striped Mullet, Southern Flounder and Sheepshead- Joe Shepard

# State of Louisiana



James H. Jenkins, Jr.  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 5, 2004

M.J. "Mike" Foster, Jr.  
Governor

## MEMORANDUM

TO: Undersecretary, Assistant Secretary-Office of Wildlife  
and Assistant Secretary-Office of Fisheries

FROM: James H. Jenkins, Jr., Secretary

SUBJECT: Commission Meeting Agenda - February 5, 2004

Please write on the bottom of this memo and return to Susan Hawkins by Friday, January 16th any agenda items your office may have for the **Thursday, February 5th** Commission Meeting to be held in Baton Rouge, Louisiana, at the Wildlife and Fisheries Building, 2000 Quail Drive. This meeting will begin at 10:00 a.m. on February 5th. If you do not have anything for the agenda, please return memo and indicate so on the bottom of this memo. We cannot add anything to the agenda that requires commission action after we have published the agenda in the state journal.

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JHJ/sch

cc: Commissioners  
Don Puckett  
Winton Vidrine  
Tommy Prickett  
Bennie Fontenot ✓  
Karen Foote  
Wynnette Kees  
Brandt Savoie  
Ewell Smith  
Marianne Burke

*Susan:*

*I have no agenda  
item(s) from the Wildlife  
Fish Division. Thank*

*Bennie*

*C. John Rouse*

# State of Louisiana



James H. Jenkins, Jr.  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 5, 2004

M.J. "Mike" Foster, Jr.  
Governor

## MEMORANDUM

TO: Undersecretary, Assistant Secretary-Office of Wildlife  
and Assistant Secretary-Office of Fisheries

FROM: James H. Jenkins, Jr., Secretary

SUBJECT: Commission Meeting Agenda - February 5, 2004

Please write on the bottom of this memo and return to Susan Hawkins by Friday, January 16th any agenda items your office may have for the **Thursday, February 5th** Commission Meeting to be held in Baton Rouge, Louisiana, at the Wildlife and Fisheries Building, 2000 Quail Drive. This meeting will begin at 10:00 a.m. on February 5th. If you do not have anything for the agenda, please return memo and indicate so on the bottom of this memo. We cannot add anything to the agenda that requires commission action after we have published the agenda in the state journal.

Resolutions and Notices of Intent should be included with the list of items to be placed on the agenda. Thank you for your cooperation!

JHJ/sch

cc: Commissioners  
Don Puckett  
Winton Vidrine  
Tommy Prickett  
Bennie Fontenot  
Karen Foote  
Wynnette Kees  
Brandt Savoie ✓  
Ewell Smith  
Marianne Burke

*None*  
*Brandt*



# State of Louisiana



James H. Jenkins, Jr.  
Secretary

Department of Wildlife & Fisheries  
Post Office Box 98000  
Baton Rouge, LA 70898-9000  
(225) 765-2800  
January 5, 2004

M.J. "Mike" Foster, Jr.  
Governor

## MEMORANDUM

TO: Undersecretary, Assistant Secretary-Office of Wildlife  
and Assistant Secretary-Office of Fisheries

FROM: James H. Jenkins, Jr., Secretary

SUBJECT: Commission Meeting Agenda - **February 5, 2004**

Please write on the bottom of this memo and return to Susan Hawkins by Friday, January 16th any agenda items your office may have for the **Thursday, February 5th** Commission Meeting to be held in Baton Rouge, Louisiana, at the Wildlife and Fisheries Building, 2000 Quail Drive. This meeting will begin at 10:00 a.m. on February 5th. If you do not have anything for the agenda, please return memo and indicate so on the bottom of this memo. We cannot add anything to the agenda that requires commission action after we have published the agenda in the state journal.

Resolutions and Notices of Intent should be included with the list of items to be placed on the agenda. Thank you for your cooperation!

JHJ/sch

cc: Commissioners  
Don Puckett  
Winton Vidrine  
Tommy Prickett  
Bennie Fontenot  
Karen Foote  
Wynnette Kees  
Brandt Savoie  
Ewell Smith  
Marianne Burke